*Advanced*
GeoEnvironmental, Inc.

05 May 2005
AGE-NC Project No. 99-0645

Mr. Nicholas Bokides
MEL BOKIDES PETROLEUM INC.
PO Box 7747
Stockton, California 95267

**Subject:** **Quarterly Report - First Quarter 2005**
**Former MEL BOKIDES PETROLEUM - Linden**
**8203 East Highway 26, Stockton, California**

Dear Mr. Bokides:

At your request, *Advanced* GeoEnvironmental, Inc. has prepared the enclosed quarterly report for 8203 East Highway 26, Stockton, California. The scope of work included operation, maintenance and sampling of a soil-vapor extraction system, quarterly ground water monitoring and preparation of this report. Electronic copies of this report will be forwarded to Ms. Margaret Lagorio of the San Joaquin County Environmental Health Department (EHD) and to Mr. James Barton of the Central Valley Regional Water Quality Control Board (CVRWQCB).

If you have any questions or require further information, please contact our office at (209) 467-1006.

Sincerely,

***Advanced* GeoEnvironmental, Inc.**

William R. Little
Senior Project Geologist
California Professional Geologist #7473

cc: Ms. Margaret Lagorio, EHD
Mr. James Barton, CVRWQCB

837 Shaw Road, Stockton, California 95215
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# Quarterly Report - First Quarter 2005

**Former MEL BOKIDES PETROLEUM - Linden**
**8203 East Highway 26, Stockton, California**

05 May 2005
AGE-NC Project No. 99-0645

*PREPARED FOR:*

Mr. Nicholas Bokides
MEL BOKIDES PETROLEUM INC.

*PREPARED BY:*


## *Advanced* GeoEnvironmental, Inc.

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# Quarterly Report - First Quarter 2005
## Former MEL BOKIDES PETROLEUM - Linden
## 8203 East Highway 26, Stockton, California

**TABLE OF CONTENTS**

# Quarterly Report - First Quarter 2005
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## 8203 East Highway 26, Stockton, California

### TABLE OF CONTENTS

# Quarterly Report - First Quarter 2005
## Former MEL BOKIDES PETROLEUM - Linden
## 8203 East Highway 26, Stockton, California

## 1.0. INTRODUCTION

At the request of Mr. Nick Bokides of Mel Bokides Petroleum (MBP), *Advanced* GeoEnvironmental, Inc. (AGE) has prepared this quarterly report for the property located at 8203 East Highway 26, Stockton, California (site). The scope of work included operation, maintenance and sampling of a soil-vapor extraction system, quarterly ground water monitoring and preparation of this report. The report was prepared in accordance with guidelines issued by the Central Valley Regional Water Quality Control Board (CVRWQCB) for subsurface investigations of former underground storage tank (UST) systems. The site location and site plan are illustrated on Figures 1 and 2, respectively; site background information is summarized in Appendix A.

Four soil-vapor extraction wells (VW1A, VW1B, VW2 and VW3) have been installed at the site, one well (VW1B) screened in petroleum hydrocarbon-impacted soil and the others screened in clean soil; however, based on individual SVE well feasibility testing, AGE determined that well VW1B should adequately capture soil-vapor to mitigate the adsorbed hydrocarbons at the site, while use of the remaining wells have demonstrated counter-productive results.

## 2.0 PROCEDURES

All field work procedures and reporting requirements are in accordance with guidelines issued by the Central Valley Region of the Regional Water Quality Control Board (CVRWQCB) for subsurface investigation of underground storage tank (UST) system sites and the San Joaquin County Environmental Health Department (EHD) for sampling of ground water monitoring wells. The operation and monitoring of the soil-vapor extraction system was in accordance with the AGE-prepared *Soil Remediation - System Design*, dated 01 September 2004 and approved by the EHD.

### 2.1. SOIL-VAPOR EXTRACTION SYSTEM

Well VW1B had been piped directly to the soil-vapor extraction unit (VES) located within a fenced enclosure on the north side of the site (Figure 2) using 2-inch diameter Schedule 40 PVC piping. In-line, the VES consists of a 55-gallon moisture knockout vessel for moisture separation and to prevent water collection within the treatment media, three 300-pound (lb) carbon canisters, then a Fuji, 5-horsepower, regenerative vacuum blower capable of drawing a maximum 110 standard cubic feet per minute (scfm) of vapor, and finally two 1,500-pound carbon vessels to adsorb hydrocarbon vapor from the subsurface (Figure 2). The SVE unit is operated in accordance with San Joaquin Unified Air Pollution Control District (APCD) permit 5984-1.

## 2.2. SOIL-VAPOR EXTRACTION

The SVE system was observed or maintained weekly and monitored monthly. During each monitoring event, the flow rate of extracted soil-vapor (influent) was measured using a totalizing-flow Blue White roto-meter. Vacuum potential was measured at the 2-inch influent line by the magnehelic vacuum gauge. In addition, the organic vapor concentrations in the influent stream (before entering the blower) and the effluent stream (after exiting the carbon unit) were measured using the OVM. A Magnehelic vacuum gauge was temporarily attached to the inlet of the blower to measure vacuum pressure exerted on the extraction well, and a cumulative flow meter was utilized downstream of the carbon canisters to monitor air flow. Sampling ports were installed upstream of the knockout vessel and downstream of the 1,500-lb carbon vessels to recover influent and effluent SVE air flow samples used to monitor the efficiency of hydrocarbon removal; in addition, the influent and effluent streams were monitored routinely for the presence of organic vapor using an organic vapor meter (OVM) equipped with a photo-ionization detector (PID: Thermo Environmental 580; 10.0 eV; calibrated to isobutylene). Field measurements, recorded at regular intervals between 17 December 2004 and 23 March 2005, are summarized in Table 1.

Influent and effluent soil-vapor samples were collected on 21 January, 16 February and 08 March 2005; an effluent soil-vapor sample was collected on 23 March 2005. The influent vapor samples were collected from within a vacuum chamber directly into Tedlar vapor bags; the effluent samples were collected directly out of the effluent stream. The samples were labeled, placed in a cooler and transported under chain of custody to Cal Tech Environmental Laboratories (CTEL) in Paramount, a State of California Department of Health Services (DHS)-certified analytical laboratories. The soil-vapor samples were analyzed for:

- Total petroleum hydrocarbons quantified as gasoline (TPH-g) in accordance with EPA Method 8015 Modified and
- Benzene, toluene, ethylbenzene and total xylenes (BTEX) and methyl tertiary butyl ether (MTBE) in accordance with EPA Method 8020.

## 2.3. MONITORING WELL EVACUATION AND MONITORING

On 25 January 2005, the water level in each of three monitoring wells was measured relative to the top of the well casing using a Solinst water level meter. After water levels were measured, a dedicated, disposable plastic bailer was used to purge each well. Four and one-half to five gallons (a minimum of three well volumes) of water were removed from the wells. Temperature, pH and conductivity of the purged water were measured at one-and-one-half gallon intervals using an Oakton water analyzer during purging. The values had generally stabilized by the end of the purging

process (Appendix B). Purged water was stored on-site in 55-gallon, DOT-approved drums.

### 2.4. COLLECTION AND ANALYSIS OF GROUND WATER SAMPLES

Prior to collection of ground water samples, the depth to ground water was re-measured in each purged well to ensure that a minimum of 80% of the well volume had recharged. Then a water sample was collected from each well using the dedicated disposable plastic bailer. Each water sample was transferred into three chilled 40-ml volatile organic analysis (VOA) vials containing 0.5 ml hydrochloric acid (18%) as a sample preservative and one 1-liter amber bottle. After collection, the samples were labeled and placed in a chilled container for transportation under chain of custody to CTEL, a California DHS-certified analytical laboratory, in Paramount, California. Each sample was analyzed for:

- TPH-g and diesel (TPH-d) by EPA Method 8015M;
- BTEX and the oxygenated fuel additives MTBE, tertiary butyl alcohol (TBA), di-isopropyl ether (DIPE), ethyl tertiary butyl ether (ETBE) and tertiary amyl methyl ether (TAME), ethyl-dibromide (EDB) and 1,2-dichloroethane (1,2-DCA) by EPA Method 8260 Modified.

## 3.0. FINDINGS

From field data collected at the SVE remediation system between December 2004 and 08 March 2005, AGE determined the average TPH-g concentration and the average air flow rate, and calculated the approximate mass and volume of hydrocarbons removed. Ground water elevation and flow direction were determined from the field data collected on 25 January 2005; hydrocarbon-impact to ground water was inferred from laboratory analysis of the samples.

### 3.1. SOIL-VAPOR EXTRACTION

During the first quarter 2005, the SVE unit operated at an average air flow rate of 65 scfm, generating an induced vacuum (negative pressure) of approximately 30 inches of water, measured in the piping between the blower and extraction well. The SVE unit operation was continuous over the quarter, until 08 March when the system was disengaged due to carbon breakthrough. The carbon media was replaced on 23 March 2005; when the system was re-started.

21 January: TPH-g was detected from the influent SVE sample at a concentration of 450 micrograms per liter (µg/l); BTEX compounds were detected at 2.0 µg/l toluene, 3.8 µg/l ethylbenzene, 41 µg/l

xylene and MTBE was detected at a concentration of 35 µg/l. TPH-g was not detected in the effluent SVE sample; 1.4 µg/l toluene and 5 µg/l xylene were detected in the effluent SVE sample; MTBE was not detected.

16 February: TPH-g was detected from the influent SVE sample at a concentration of 820 µg/l; BTEX compounds were detected at 11 µg/l benzene and 23 µg/l toluene; and MTBE was detected at a concentration of 180 µg/l. Contaminants of concern (COCs) were not detected in the effluent SVE sample.

08 March: TPH-g was detected from the influent SVE sample at a concentration of 650 µg/l; BTEX compounds were detected at 36 µg/l toluene, 2.2 µg/l ethylbenzene and 12 µg/l xylene; MTBE was detected at a concentration of 7.6 µg/l. TPH-g was detected in the effluent SVE sample at a concentration of 110 µg/l and the BTEX compounds toluene and xylene were detected at concentrations of 7.5 µg/l and 5.2 µg/l, respectively; MTBE was not detected.

23 March: COCs were not detected in the effluent SVE sample.

The analytical results are summarized in Table 2. The laboratory reports (CTEL Project Nos. CT214-0412192, 0501132, 0502102, 0503081 and 0503243) quality assurance/quality control (QA/QC) reports and chain of custody forms are included in Appendix C.

Extracted organic vapor concentrations measured with the OVM were one quarter to one half of the values when compared to the analytical results from the soil-vapor samples. The highest concentration of organic vapor measured with the OVM was 247 ppm (February).

## 3.2. MASS OF RECOVERED HYDROCARBONS

The hydrocarbon mass (TPH-g) removed during the operating period was calculated using the following equation: $M = C \bullet Q \bullet t$

where: M = cumulative mass recovered (kg)
C = soil-vapor concentration ($kg/m^3$)
Q = extraction flow rate ($m^3/hr$)
t = operational period, in hours

The estimated mass of hydrocarbons removed was based on laboratory analysis of soil-vapor samples, the flow rate and operational time. The mass of extracted hydrocarbons was calculated for the time period using average hydrocarbon concentrations of influent soil-vapor sample data, average air flow rates and duration of operation. The operational results are summarized in Table 1.

Approximately 156.135 kg (344.25 pounds), or 55.09 gallons of hydrocarbons were extracted by the SVE system between 17 November 2004 and 17 March 2005. The volume and mass calculations are attached in Appendix D. A total of 1,138.25 pounds, or 182.09 gallons of hydrocarbons have been extracted by the SVE system since 05 October 2004.

### 3.3. GROUND WATER GRADIENT AND FLOW DIRECTION

Depth to ground water at the site on 25 January 2005 ranged from 91.29 feet to 91.64 feet below the monitoring well casing tops. The ground water elevation in each well was calculated from this data. The ground water elevations ranged between 46.06 feet (MW-3) and 46.14 feet (MW-2) below mean sea level (MSL). Ground water decreased an average of 5.8 feet since the October 2004 monitoring event (Table 3).

At the time of the January 2005 monitoring event, the ground water flow direction was inferred to be southeast at a gradient of approximately 0.001 ft/ft. Figure 3 illustrates the contoured ground water elevations.

### 3.4. ANALYTICAL RESULTS OF WATER SAMPLES

COCs were not detected in any of the collected ground water samples. Analytical results from the ground water samples are summarized in Tables 4 and 5. The laboratory report (CTEL Project No. CT214-0501144), QA/QC reports and chain of custody form are included in Appendix E. GeoTracker confirmation pages of submitted laboratory electronic deliverable format (EDF) files are included in Appendix F.

## 4.0. SUMMARY AND CONCLUSIONS

Based on the data collected from the site, AGE concludes:

- Approximately 156.135 kg (344.25 pounds), or 55.09 gallons of hydrocarbons were extracted by the SVE system between 17 November 2004 and 17 March 2005. The volume and mass calculations are attached in Appendix D. A total of 1,138.25 pounds, or 182.09 gallons of hydrocarbons were extracted by the SVE system since 05 October 2004. Soil-vapor extraction samples were adequate for continued remediation.
- The ground water flow direction was inferred to be southeast at a gradient of approximately 0.001 ft/ft during the January sampling and monitoring event.
- COCs were not detected in ground water monitoring well samples

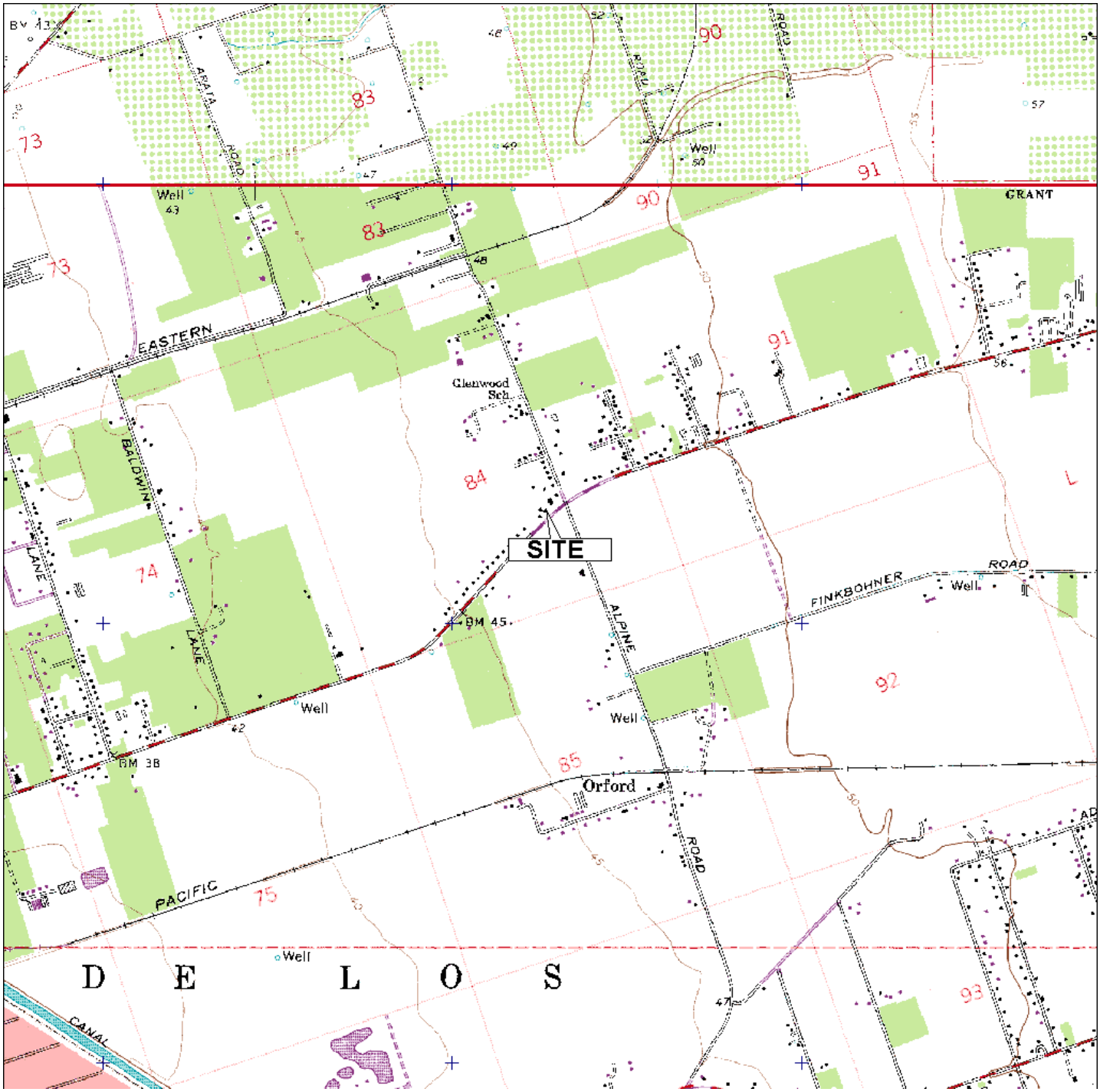
## 5.0. RECOMMENDATIONS

Based on the findings of this investigation, AGE recommends continuation of the soil-vapor extraction and quarterly ground water monitoring program; the next quarterly monitoring event should be scheduled for July 2005.

## 6.0. LIMITATIONS

Our professional services were performed using that degree of care and skill ordinarily exercised by environmental consultants practicing in this or similar localities. The findings were based upon analytical results provided by an independent laboratory. Evaluation of the hydrogeologic conditions at the site for the purpose of this investigation was made from a limited number of available data points (e.g., soil-vapor, ground water samples) and subsurface conditions may vary away from these data points. No other warranty, expressed or implied, is made as to the professional interpretations, opinions and recommendations contained in this report.

# FIGURES




N

SCALE
0 2000 4000
FEET

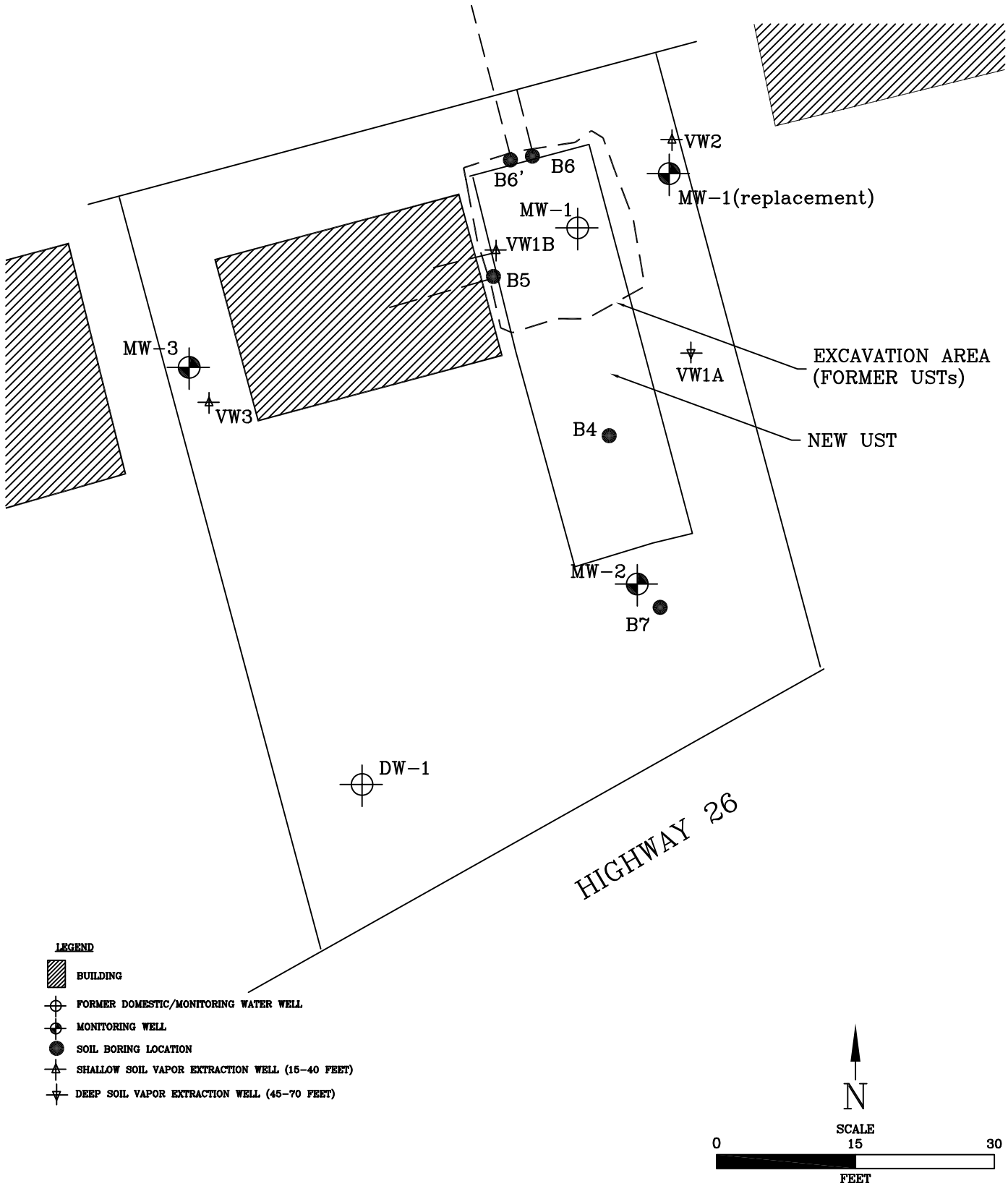
STOCKTON EAST QUADRANGLE, CALIFORNIA
7.5 MINUTE SERIES (U.S. GEOLOGICAL SURVEY)
PHOTOREVISED 1987

# LOCATION MAP

## MEL BOKIDES PETROLEUM – LINDEN
## 8203 EAST HIGHWAY 26
## STOCKTON, CALIFORNIA

*Advanced* GeoEnvironmental, Inc.
*of Northern California*

| | | |
|---|---|---|
| PROJECT NO. AGE-NC-99-0645 | FILE: LOCATION | FIGURE: 1 |
| DATE: 17 MAY 2002 | DRAWN BY: MAC | |

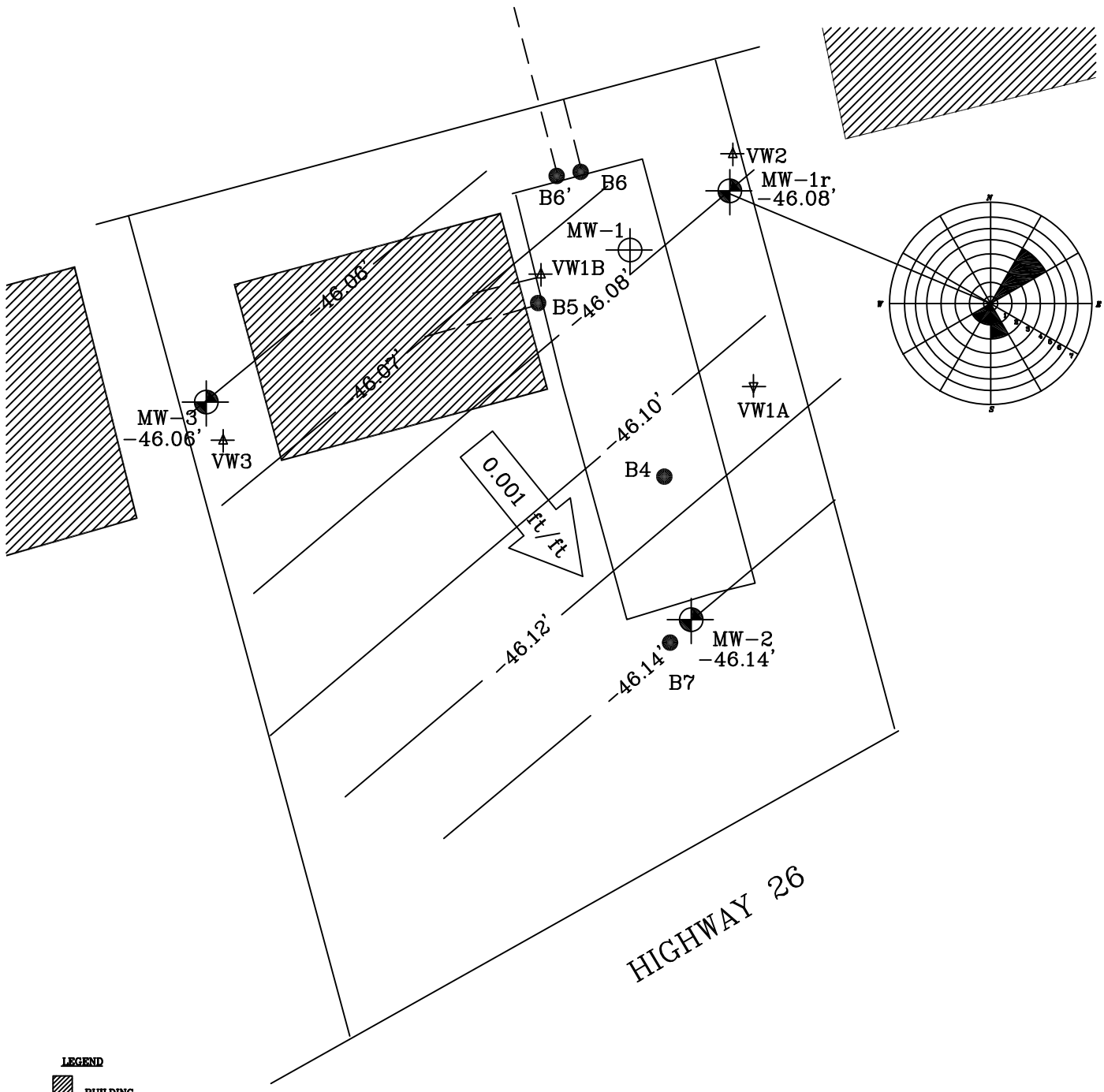



# SITE PLAN

## MEL BOKIDES PETROLEUM – LINDEN
## 8203 EAST HIGHWAY 26
## STOCKTON, CALIFORNIA

*Advanced* GeoEnvironmental, Inc.
*of Northern California*

| | | |
|---|---|---|
| PROJECT NO. AGE-NC-99-0645 | FILE: MBPLFig2 | FIGURE: |
| DATE: 28 MAY 2004 | DRAWN BY: MAC | 2 |




# GROUND WATER FLOW MAP

## MEL BOKIDES PETROLEUM – LINDEN
## 8203 EAST HIGHWAY 26
## STOCKTON, CALIFORNIA

*Advanced* GeoEnvironmental, Inc.
*of Northern California*

| | | |
|---|---|---|
| PROJECT NO. AGE-NC-99-0645 | FILE: MBPL0604 | FIGURE: |
| DATE: 05 APRIL 2005 | DRAWN BY: MAC | 3 |

# TABLES

# TABLE 1

SOIL VAPOR EXTRACTION DATA
Former MEL BOKIDES PETROLEUM - Linden
8203 East Highway 26, Stockton, California

| Date | Time | Hours | Flow (cfm) | Vacuum (inches of water) | Inlet (ppmv) | Outlet (ppmv) |
|---|---|---|---|---|---|---|
| 10-05-04 | 1:30 pm | 0 | 55 | 25 | 2020 | 0 |
| 10-13-04 | 12:30 pm | 144 | 55 | 21 | 847 | 15 |
| 10-21-04 | 7:30 am | 332 | 65 | 23 | 538 | 3.8 |
| 11-03-04 | 3:00 pm | 647 | 50 | 18 | - | 13 |
| 11-17-04 | 1:00 pm | 983 | 54 | 18 | 274 | 3 |
| 12-22-04 | 11:30 am | 1823 | 70 | 26 | 838 | 4.1 |
| 01-21-05 | 12:00 pm | 2543 | 65 | 32 | 135 | 11 |
| 02-16-05 | 3:30 pm | 3167 | 65 | 29 | 247 | 88 |
| 03-08-05 | 7:30 am | 3647 | 64 | 30 | 224 | 27 |
| 03-17-05 | 2:30 pm off | 3863 | 63 | 23 | 66 | 74 |
| 03-23-05 | 3:00 pm on | 3863 | 45 | 30 | - | - |

*Notes:*
cfm: cubic feet per minute
ppmv: parts per million vapor

# TABLE 2

ANALYTICAL RESULTS OF SOIL-VAPOR SAMPLES
Former MEL BOKIDES PETROLEUM - Linden
8203 East Highway 26, Stockton, California

| Sample I.D. | TPH as Gasoline | MTBE | Benzene | Toluene | Ethyl-benzene | Xylenes |
|---|---|---|---|---|---|---|
| Influent Pre-Carbon adsorption 10-05-04 | **12,000** | **160** | **15** | **450** | **40** | **300** |
| Effluent Post-Carbon adsorption 10-05-04 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <1.0 |
| Influent Pre-Carbon adsorption 10-13-04 | **3,900** | **130** | **11** | **260** | **27** | **180** |
| Effluent Post-Carbon adsorption 10-13-04 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <1.0 |
| Influent Pre-Carbon adsorption 10-21-04 | **1,300** | **340** | **8.0** | **87** | **28** | **220** |
| Effluent Post-Carbon adsorption 10-21-04 | **110** | <0.5 | <0.5 | **2.9** | **5.0** | **40** |
| Influent Pre-Carbon adsorption 11-03-04 | **2,000** | **77** | <1.0 | **26** | **32** | **300** |
| Effluent Post-Carbon adsorption 11-03-04 | <25 | 22 | <0.25 | <0.25 | <0.25 | <0.25 |
| Influent Pre-Carbon adsorption 11-17-04 | **500** | **76** | <0.5 | **7.3** | **9.7** | **92** |
| Effluent Post-Carbon adsorption 11-17-04 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <1.0 |
| Influent Pre-Carbon adsorption 12-22-04 | **650** | **12** | <0.5 | **1.7** | **2.6** | **25** |
| Effluent Post-Carbon adsorption 12-22-04 | **120** | <0.5 | <0.5 | <0.5 | <0.5 | **4.0** |

# TABLE 2

ANALYTICAL RESULTS OF SOIL-VAPOR SAMPLES
Former MEL BOKIDES PETROLEUM - Linden
8203 East Highway 26, Stockton, California

| Sample I.D. | TPH as Gasoline | MTBE | Benzene | Toluene | Ethyl-benzene | Xylenes |
|---|---|---|---|---|---|---|
| Influent Pre-Carbon adsorption 01-21-05 | **450** | **35** | <0.5 | **2.0** | **3.8** | **41** |
| Effluent Post-Carbon adsorption 01-21-05 | <50 | <0.5 | <0.5 | **1.4** | <0.5 | **5.0** |
| Influent Pre-Carbon adsorption 02-16-05 | **820** | **180** | **11** | **23** | <1.0 | <1.0 |
| Effluent Post-Carbon adsorption 02-16-05 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <1.0 |
| Influent Pre-Carbon adsorption 03-08-05 | **650** | **7.6** | <0.5 | **36** | **2.2** | **12** |
| Effluent Post-Carbon adsorption 03-08-05 | **110** | <0.5 | <0.5 | **7.5** | <0.5 | **5.2** |
| Effluent Post-Carbon adsorption 03-23-05 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <1.0 |

*Notes:*
TPH: Total petroleum hydrocarbons
MTBE: Methyl-tertiary-Butyl Ether

# TABLE 3

GROUND WATER ELEVATION DATA
Former MEL BOKIDES PETROLEUM - Linden
8203 East Highway 26, Stockton, California
(feet)

| Well No. (well screen) | Casing Elevation | Sample Date | Depth to Ground Water | Ground Water Elevation |
|---|---|---|---|---|
| MW-1 | 45.28 | 11/02/01 | 90.88 | -45.60 |
| (80' to 100') | | 04/12/02 | 81.62 | -36.34 |
| Destroyed | | 07/12/02 | 91.03 | -45.75 |
| MW-1r | 45.56 | 10/06/03 | 95.34 | -49.78 |
| (80' to 100') | | 03/11/04 | 86.09 | -40.53 |
| | | 06/30/04 | 94.00 | -48.44 |
| | | 10/20/04 | 97.67 | -52.11 |
| | | 01/25/05 | 91.64 | -46.08 |
| MW-2 | 45.29 | 11/02/01 | 90.86 | -45.57 |
| (80' to 100') | | 04/12/02 | 81.61 | -36.32 |
| | | 07/12/02 | 91.03 | -45.72 |
| | | 04/01/03 | 84.93 | -39.64 |
| | 45.30 | 10/06/03 | 95.19 | -49.90 |
| | | 03/11/04 | 85.84 | -40.55 |
| | | 06/30/04 | 93.84 | -48.54 |
| | | 10/20/04 | 97.45 | -52.15 |
| | | 01/25/05 | 91.44 | -46.14 |
| MW-3 | 45.23 | 11/02/01 | 90.74 | -45.51 |
| (80' to 100') | | 04/12/02 | 81.49 | -36.26 |
| | | 07/12/02 | 90.90 | -45.67 |
| | | 04/01/03 | 86.72 | -41.49 |
| | 45.23 | 10/06/03 | 95.09 | -49.86 |
| | | 03/11/04 | 85.78 | -40.55 |
| | | 06/30/04 | 93.80 | -48.57 |
| | | 10/20/04 | 97.37 | -52.14 |
| | | 10/29/04 | 96.77 | -51.54 |
| | | 01/25/05 | 91.29 | -46.06 |
| Domestic Well Destroyed | 45.73 | 11/02/01 | 91.00 | -45.27 |

# TABLE 4

ANALYTICAL RESULTS OF GROUND WATER SAMPLES - EPA METHODS 8015M/8020
Former MEL BOKIDES PETROLEUM - Linden
8203 East Highway 26, Stockton, California
(µg/l)

| Well I. D. (Screen) | Sample Date | Depth to GW (feet) | 8015M | | Volatile aromatic compounds (8020) | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | TPH-d | TPH-g | MTBE | Benzene | Toluene | Ethyl-benzene | Xylenes |
| MW-1 (80' to 100') | 11/02/01 | 90.88 | <50 | <50 | **5.9** | <0.5 | <0.5 | <0.5 | <0.5 |
| | 04/12/02 | 81.62 | <50 | **120** | <1.0 | <0.5 | <0.5 | <0.5 | <1.0 |
| | 07/12/02 | 91.03 | **55** | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | Destroyed | - | - | - | - | - | - | - | - |
| MW-1r (80' to 100') | 10/06/03 | 95.34 | <50 | <50 | - | <0.5 | <0.5 | <0.5 | <0.5 |
| | 03/11/04 | 86.09 | <50 | <50 | - | <0.5 | <0.5 | <0.5 | <0.6 |
| | 06/30/04 | 94.00 | <50 | <50 | - | <0.5 | <0.5 | <0.5 | <0.6 |
| | 10/20/04 | 97.67 | <50 | <50 | - | <0.5 | <0.5 | <0.5 | <0.6 |
| | 01/25/05 | 91.64 | <50 | <50 | - | <0.5 | <0.5 | <0.5 | <0.6 |
| MW-2 (80' to 100') | 11/02/01 | 90.86 | <50 | <50 | <5.0 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 04/12/02 | 81.61 | <50 | **130** | <1.0 | <0.5 | <0.5 | <0.5 | <1.0 |
| | 07/12/02 | 91.03 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 04/01/03 | 84.93 | <50 | <50 | <1.0 | <0.5 | <0.5 | <0.5 | <1.0 |
| | 10/06/03 | 95.19 | <50 | <50 | - | <0.5 | <0.5 | <0.5 | <0.5 |
| | 03/11/04 | 85.84 | <50 | <50 | - | <0.5 | <0.5 | <0.5 | <0.6 |
| | 06/30/04 | 93.84 | <50 | <50 | - | <0.5 | <0.5 | <0.5 | <0.6 |
| | 10/20/04 | 97.45 | <50 | <50 | - | <0.5 | <0.5 | <0.5 | <0.6 |
| | 01/25/05 | 91.44 | <50 | <50 | - | <0.5 | <0.5 | <0.5 | <0.6 |

# TABLE 4

ANALYTICAL RESULTS OF GROUND WATER SAMPLES - EPA METHODS 8015M/8020
Former MEL BOKIDES PETROLEUM - Linden
8203 East Highway 26, Stockton, California
(µg/l)

| Well I. D. (Screen) | Sample Date | Depth to GW (feet) | 8015M | | Volatile aromatic compounds (8020) | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | TPH-d | TPH-g | MTBE | Benzene | Toluene | Ethyl-benzene | Xylenes |
| MW-3 (80' to 100') | 11/02/01 | 90.74 | <50 | <50 | <5.0 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 04/12/02 | 81.49 | <50 | <50 | <1.0 | <0.5 | <0.5 | <0.5 | <1.0 |
| | 07/12/02 | 91.03 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 04/01/03 | 86.72 | <50 | <50 | <1.0 | <0.5 | <0.5 | <0.5 | <1.0 |
| | 10/06/03 | 95.09 | <50 | <50 | - | <0.5 | <0.5 | <0.5 | <0.5 |
| | 03/11/04 | 85.78 | <50 | <50 | - | <0.5 | <0.5 | <0.5 | <0.6 |
| | 06/30/04 | 93.80 | <50 | <50 | - | <0.5 | <0.5 | <0.5 | <0.6 |
| | 10/20/04 | 97.37 | <50 | ***600*** | - | ***5.3*** | ***17*** | ***9.7*** | ***67*** |
| | 10/29/04 | 96.77 | <50 | <50 | - | <0.5 | <0.5 | <0.5 | <0.6 |
| | 01/25/05 | 91.29 | <50 | <50 | - | <0.5 | <0.5 | <0.5 | <0.6 |

*Notes:*
µg/l: micrograms per liter
TPH-g/-d: Total petroleum hydrocarbons as gasoline/diesel
MTBE: Methyl-tertiary-Butyl Ether

# TABLE 5

ANALYTICAL RESULTS OF GROUND WATER SAMPLES - EPA METHOD 8260B
Former MEL BOKIDES PETROLEUM - Linden
8203 East Highway 26, Stockton, California
(µg/l)

| Sample ID | DIPE | ETBE | MTBE | TAME | TBA | Methanol | Ethanol | EDB | 1,2-DCA |
|---|---|---|---|---|---|---|---|---|---|
| MW1/11-02-01 | <1.0 | <1.0 | **4.7** | <1.0 | <5.0 | <500 | <50 | <1.0 | <1.0 |
| MW1/04-12-02 | <1.0 | <1.0 | <1.0 | <1.0 | <25 | | | <0.5 | <0.5 |
| MW1/07-12-02 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 | <500 | <50 | <0.5 | <0.5 |
| Destroyed | - | - | - | - | - | - | - | - | - |
| MW1r/10-06-03 | <5.0 | <5.0 | **120** | <5.0 | <50 | - | - | <5.0 | <5.0 |
| MW1r/03-11-04 | <1.0 | <1.0 | <1.0 | <1.0 | <10 | - | - | <0.5 | <0.5 |
| MW1r/06-30-04 | <1.0 | <1.0 | <1.0 | <1.0 | <10 | - | - | <0.5 | <0.5 |
| MW1r/10-20-04 | <1.0 | <1.0 | <1.0 | <1.0 | <10 | - | - | <0.5 | <0.5 |
| MW1r/01-25-05 | <1.0 | <1.0 | <1.0 | <1.0 | <10 | - | - | <0.5 | <0.5 |
| MW2/11-02-01 | <1.0 | <1.0 | <1.0 | <1.0 | <5.0 | <500 | <50 | <1.0 | <1.0 |
| MW2/04-12-02 | <1.0 | <1.0 | <1.0 | <1.0 | <25 | | | <0.5 | <0.5 |
| MW2/07-12-02 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 | <500 | <50 | <0.5 | <0.5 |
| MW2/04-01-03 | <1.0 | <1.0 | <1.0 | <1.0 | <10 | <1,000 | <50 | <0.5 | <0.5 |
| MW2/10-06-03 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 | - | - | <0.5 | <0.5 |
| MW2/03-11-04 | <1.0 | <1.0 | <1.0 | <1.0 | <10 | - | - | <0.5 | <0.5 |
| MW2/06-30-04 | <1.0 | <1.0 | <1.0 | <1.0 | <10 | - | - | <0.5 | <0.5 |
| MW2/10-20-04 | <1.0 | <1.0 | <1.0 | <1.0 | <10 | - | - | <0.5 | <0.5 |
| MW2/01-25-05 | <1.0 | <1.0 | <1.0 | <1.0 | <10 | - | - | <0.5 | <0.5 |

# TABLE 5

ANALYTICAL RESULTS OF GROUND WATER SAMPLES - EPA METHOD 8260B
Former MEL BOKIDES PETROLEUM - Linden
8203 East Highway 26, Stockton, California
(µg/l)

| Sample ID | DIPE | ETBE | MTBE | TAME | TBA | Methanol | Ethanol | EDB | 1,2-DCA |
|---|---|---|---|---|---|---|---|---|---|
| MW3/11-02-01 | <1.0 | <1.0 | <1.0 | <1.0 | <5.0 | <500 | <50 | <1.0 | <1.0 |
| MW3/04-12-02 | <1.0 | <1.0 | <1.0 | <1.0 | <25 | | | <0.5 | <0.5 |
| MW3/07-12-02 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 | <500 | <50 | <0.5 | <0.5 |
| MW3/04-01-03 | <1.0 | <1.0 | <1.0 | <1.0 | <10 | <1,000 | <50 | <0.5 | <0.5 |
| MW3/10-06-03 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 | - | - | <0.5 | <0.5 |
| MW3/03-11-04 | <1.0 | <1.0 | <1.0 | <1.0 | <10 | - | - | <0.5 | <0.5 |
| MW3/06-30-04 | <1.0 | <1.0 | <1.0 | <1.0 | <10 | - | - | <0.5 | <0.5 |
| MW3/10-20-04 | <1.0 | <1.0 | <1.0 | <1.0 | <10 | - | - | <0.5 | <0.5 |
| MW3/10-29-04 | <1.0 | <1.0 | <1.0 | <1.0 | <10 | - | - | <0.5 | <0.5 |
| MW3/01-25-05 | <1.0 | <1.0 | <1.0 | <1.0 | <10 | - | - | <0.5 | <0.5 |

*Notes:*
µg/l: micrograms per liter
DIPE: Di-isopropyl Ether
ETBE: Ethyl tertiary-Butyl Ether
MTBE: Methyl-tertiary-Butyl Ether
TAME: tertiary-Amyl Methyl Ether
TBA: tertiary Butyl Alcohol or tertiary Butanol
EDB: Ethylene Dibromide or 1,2-Dibromoethane
1,2-DCA: 1,2-Dichloroethane

# APPENDIX A

# Site Background Information
## Former MEL BOKIDES PETROLEUM - Linden
## 8203 East Highway 26, Stockton, California

The site was formerly a gasoline station and mini-mart. On 07 May 1999, three USTs, associated piping and a dispenser island were removed from the site by Semco of Modesto. Six soil samples were collected beneath the USTs, two soil samples were collected beneath the dispenser area and four laboratory composited soil samples were collected from the excavated soil.

Approximately 150 cubic yards of soil were excavated during removal of the USTs; subsequent to the soil sampling activities, the soil was placed back into the excavation.

Laboratory analysis of the soil samples detected total petroleum hydrocarbons quantified as gasoline (TPH-g) at concentrations up to 17,000 milligrams per kilogram (mg/kg) beneath the northern UST (Tank#1); benzene, toluene, ethylbenzene and xylenes (BTEX) were detected at concentrations as high as 3,000,000 micrograms per kilogram (µg/kg).

Methyl tertiary butyl ether (MTBE) and/or tertiary butanol (TBA) were detected in soil samples collected from the former UST excavation and stockpiled soil at the site at concentrations as high as 160,000 µg/kg MTBE. The presence of high concentrations of MTBE in the soil samples indicated that an unassessed mass of MTBE remained at the site.

## INTERIM SOIL REMEDIATION

On 21 March 2000, AGE personnel excavated 195 metric tons of impacted soil from the former tank pit utilizing an excavator outfitted with a 2.45 cubic-yard bucket. Following the removal of the original soil backfill material, the excavation was enlarged and deepened to an approximate depth of 22 feet bsg, and soil samples were collected from the floor (F-1) and walls (WW, EW, NW and SW) of the excavation, as well as the soil stockpiles, for laboratory analysis. On 22 March 2000, the impacted soil was transported from the site and disposed of at Forward Landfill.

TPH-g was detected in excavation soil samples F-1, WW, EW and NW at 6.0 mg/kg, 23,000 mg/kg, 29 mg/kg and 32 mg/kg, respectively; TPH-g was not detected in sample SW.

BTEX compounds were detected in all excavation samples except SW, at maximum concentrations of 56 mg/kg benzene, 1,700 mg/kg toluene, 470 mg/kg ethylbenzene and 2,900 mg/kg xylenes in sample WW.

MTBE was detected in all excavation samples at concentrations ranging from 28 µg/kg (SW) to 140,000 µg/kg (WW). TAME was detected only in sample WW at 9,200 µg/kg; TBA was detected in samples F-1 and NW at 6,100 µg/kg and 100 µg/kg, respectively.

The composited stockpile soil samples contained TPH-g at concentrations ranging from 1,900 mg/kg to 2,100 mg/kg. BTEX compounds ranged from below laboratory detection limits (benzene in sample SPA-D) to 280 mg/kg (xylenes in sample SPH-L). MTBE, TAME and TBA were detected as high as 3,000 µg/kg, 240 µg/kg and 3,500 µg/kg, respectively.

AGE calculated that approximately 126 gallons of gasoline were removed in the soil excavated during the interim remediation. The highest concentrations of petroleum hydrocarbon compounds left in place were detected in the sample collected from the western wall of the former excavation. Lower concentrations of petroleum hydrocarbons as gasoline were also detected in the floor sample and samples collected from the north and west sidewalls. Fuel oxygenates, including MTBE, TAME and TBA were detected in all samples.

## SITE ASSESSMENT

On 15 through 17 October 2001, six soil borings (B1 through B6) were advanced at the site; three soil borings, B1 through B3, were established as ground water monitoring wells MW-1 through MW-3, respectively.

Soil in the area of boring B1 (MW-1) and borings B4 and B5 were found to contain high concentrations of petroleum hydrocarbons at depths of 15 bsg, with reduced concentrations encountered at depths to 70 feet bsg.

Ground water monitoring data from the initial ground water monitoring event on 02 November 2001 indicated that ground water was flowing towards the northeast, and was locally impacted by the oxygenated fuel additive MTBE.

On 27 September 2002, monitoring well MW-1 was destroyed by drilling out the entire boring length and backfilling with neat cement and bentonite in the upper 15 feet of the excavation. Additionally, the domestic on-site well was destroyed by percussion explosion and backfilled with a sand and cement mix.

## ADDITIONAL SITE ASSESSMENT AND REMEDIATION FEASIBILITY

On 09 through 11 September 2003, a total of seven soil borings were advanced at the site: boring B6' was advanced north of the excavation area at a 20 degree angle, to an extent of 80 feet; B7 was advanced southeast of well MW-2 to 70 feet bsg; boring MW-1R was installed east of the former UST area to 100 feet bsg; vapor well VW1B was advanced under the building at a 20 degree angle to an extent of 40 feet, VW1A was installed east of the former UST area to 70 feet bsg; VW2 was installed east of the former UST area to 40 feet bsg and VW3 was installed south of well MW-3 to

60 feet bsg. Soil samples were collected at five foot intervals, generally beginning at 10 feet bsg, or where native soil was encountered below back fill.

A total of 28 soil samples were analyzed. Samples from B6' had concentrations of BTEX compounds and MTBE above laboratory reporting limits. MTBE ranged from 0.010 milligrams per kilogram (mg/kg) to 0.63 mg/kg. Maximum concentrations of BTEX compounds were 0.020 mg/kg benzene, 0.060 mg/kg toluene, 0.030 mg/kg ethylbenzene and 0.070 mg/kg xylenes. The sample results from B7 showed only one contaminated sample, at 30 feet, with 0.49 mg/kg MTBE. Samples from MW-1R had 1.2 mg/kg TPH-g at 40 feet; MTBE was detected at concentrations of 0.43 mg/kg and 1.2 mg/kg at 30 and 40 feet, respectively; TAME was detected at 30 and 40 feet, at concentrations of 0.040 mg/kg and 0.030 mg/kg, respectively.

Results from VW1A showed TPH-g and TAME at 40 feet with concentrations of 4.6 mg/kg and 0.010mg/kg, respectively. MTBE was detected from 40 to 60 feet, ranging from 0.030 mg/kg to 4.2 mg/kg. Soil from VW3 had MTBE at 30 and 40 feet with concentrations of 0.020 mg/kg and 0.060 mg/kg, respectively.

Monitoring and vapor extraction wells were completed within the following intervals: MW-1R from 80 feet to 100 feet bsg; VW1B from 15 feet to 40 feet bsg; VW1A from 40 feet to 70 feet bsg; VW2 from 15 feet to 40 feet bsg; VW3 from 20 feet to 50 feet bsg.

MTBE was detected in the ground water sample collected from well MW-1 at a concentration of 120 µg/l.

## SVE REMEDIATION FEASIBILITY PROCEDURES

Two separate soil vapor extraction pilot tests were conducted on 18 September 2003 and 06 October 2003. On 18 September 2003, the upper sand layer was tested using vapor well VW1B, screened from 15 feet bsg to 40 feet bsg, as the extraction well. On 06 October 2003, a second pilot test was conducted on the fine-grained deeper impacted areas closest to ground water at the site using vapor well VW1A, screened from 40 feet bsg to 70 feet bsg as the extraction well. The pilot tests were initiated at 8:00 am and continued for 8 hours. A total of four soil vapor samples were collected during each pilot test.

Analytical results of soil vapor samples were generally highest in the second sample collected on 18 September. Extraction well VW1B results indicated: TPH-g was detected in all the soil vapor samples at concentrations ranging from11,000 µg/l to 14,000 µg/l; benzene, toluene, ethylbenzene and xylenes were detected in every sample at concentrations as high as 54 µg/l benzene, 1,400 µg/l toluene, 160 µg/l ethylbenzene, 990 µg/l xylenes; and MTBE was detected in all the samples ranging from 730 µg/l to 860 µg/l. Toluene and total xylenes were detected in one sample collected from

VW1A on 06 October at a concentration of 0.39 µg/l and 0.29µg/l, respectively. No other analytes were detected at or above laboratory reporting limits in the soil vapor samples.

The shallow test results indicated the flow rate was initially measured at 42 cfm (standard cubic feet per minute) and the maximum observed was 75 cfm. OV readings ranged from 923 ppm to 1,100 ppm. Induced vacuum measured at the extraction well VW1B ranged from 20 to 32 inches of water. On 06 October 2003, the lower screened vapor extraction test results had measured flow rates between 25 cfm and 31 cfm; a much lower flow was observed. OV readings ranged from 1.2 ppm to 2.5 ppm, which was consistent across the pilot test. Induced vacuum measured at the extraction well (VW1A) was always greater than 100 inches of water.

During the shallow soil vapor extraction pilot test (18 September) the greatest induced vacuum was measured in the observation point nearest the extraction well, at 0.60 inches of water in wells VW2 and VW3. The lowest vacuum was measured in MW-3, approximately 30 feet west of the extraction point and screened much lower in the stratigraphy at the site; however, sufficient induced vacuum was observed in the monitoring wells to demonstrate that a vertical connection may exist across the vertically separated layers at the site.

During the deeper soil vapor extraction pilot test (06 October) the greatest induced vacuum was measured in the observation point nearest the extraction well, at 0.45 inches of water in well MW-1R. The lowest vacuum was measured in VW2 and VW1B, approximately 20 feet west of the extraction point and screened above the lower stratigraphy at the site. Again, sufficient induced vacuum was observed in the monitoring wells and also in the upper soil vapor extraction wells, to demonstrate that a vertical connection may exist across the vertically separated layers at the site.

AGE plotted on a logarithmic scale the maximum vacuum measured at the observation points during the pilot test versus the distance from the extraction well. The effective radius of influence was determined by drawing a best-fit line though these data points to correlate distance to vacuum data. At a vacuum potential of 0.10 inches of water, the radius of influence is approximately 30 feet for the lower screened well (VW1A) and radius of influence is approximately 40 feet for the upper screened well (VW1B); at an induced vacuum potential of 1.0 inches of water, the radius of influence is 20 feet for well VW1A and approximately 25 feet for well VW1B. Further, a vacuum potential of 10.0 inches of water the radius of influence is less than 10 feet. Based upon an effective vacuum potential of 0.1 inches of water, the calculated effective radius of influence at the site will be 30 feet up to almost 40 feet for the upper screened vapor well. The majority of the residual impacted soil would be collected within the 40 foot radius of influence.

## SITE CONCEPTUAL CONCLUSIONS

Based on the data collected from the site, AGE concludes:

- The sand units occurred at depths of 15 to 30 feet bsg and 75 or 80 feet to 80 or 85 feet bsg. The deepest sand unit previously encountered may actually be two thinner units. Ground water was encountered at approximately 96 feet bsg. Ground water flow direction at the site was northwest. The decrease of ground water elevation of approximately 4 feet between July 2002 and October 2003 may be due to seasonal fluctuation.
- TPH-g was detected in the soil boring sample collected north of the site (B6'). Low concentrations of MTBE were detected in the soil sample to a depth of 55 feet bsg in the same boring. Benzene concentrations were detected in the two deepest soil samples collected from the northern boring, indicating the northern migration of only benzene, at a depth of 60 feet to 70 feet bsg or the presence of another source off the northern edge of the site. With no detections of benzene in the upper 55 feet of boring B6'/6, only low detections of benzene in the former UST soil boring B1, all less than 0.1 mg/kg, and the lack of detectable hydrocarbons in the soil boring MW-1R below 50 feet bsg; the source of the off-site benzene detected in the furthermost reach of boring B6' appears to be from another source than the UST release. However, soil vapor extraction on-site will likely effectively mitigate the detections off-site.
- TPH-g was not detected in the soil boring sample collected at the west edge of the site (VW3). Only low concentrations of MTBE were detected at 30 and 40 feet bsg in boring VW3. TPH-g was not detected in the soil boring sample collected at the southern edge of the site (B7). Only one detection of MTBE was in the soil, from 30 feet bsg in boring B7.
- TPH-g was only detected in the upper most soil sample from boring VW1A, at the east edge of the site. MTBE was detected in samples from boring B7 from 40 feet to 60 feet bsg. The lateral extent of adsorbed MTBE may extend below the eastern boundary of the site. Soil vapor extraction on-site will likely effectively mitigate the MTBE off-site.
- Generally, the highest concentrations of MTBE were detected within a 45 foot thick interval, occurring between 15 feet and 60 feet. The vertical extent of the MTBE-impacted soil was limited to less than 70 feet bsg.
- MTBE was detected in one ground water sample (MW-1) at a concentration of 120 µg/l. This concentration exceeds the maximum contaminant level for MTBE in drinking water.
- Based upon effective vacuum potential of 0.1 inches of water, the calculated effective radius of influence at the site for vapor wells screened from 15 feet to 40 feet bsg will be approximately 40 feet. The calculated effective radius of influence at the site for vapor wells screened from 40 feet to 70 feet bsg or greater will be approximately 30 feet.
- TPH-g, TPH-d and BTEX compounds were not detected in the three water samples collected.

# APPENDIX B

*Advanced*
GeoEnvironmental, Inc.
*837 Shaw Road, Stockton, CA 95205 (209) 467-1006 Fax (209) 467-1118*

# Ground Water Depth & Dissolved Oxygen Field Log

Project: MBP Linden

Date: 1/25/05

Field Personnel: CT

Page: 1 of 1

| Well I.D. | Time | Casing Elev. | Depth to Free Product | Depth to Water | Ground Water Elev. | Measured Depth | Actual Total Depth | ORP | Dissolved Oxygen | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | mg/l | % | °C |
| MW1 | 0819 | | | 91.64 | -46.08 | | 100.02 | | | | |
| MW2 | 0823 | | | 91.44 | -46.14 | | 100.23 | | | | |
| MW3 | 0829 | | | 91.29 | -46.00 | | 101.10 | | | | |
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*Advanced*
GeoEnvironmental, Inc.
*4005 North Wilson Way, Stockton, CA 95205 • (209) 467-1006 • Fax (209) 467-1118*

# Monitoring Well Field Log

## Well Data

| | |
|---|---|
| Project Name: MBP Linden | Project No.: AGE-NC- / Date: 1/25/05 |
| Pre-Purge DTW: 91.64 Time: 0819 | Well I.D.: MW 1 |
| Post-Purge DTW: 92.03 Time: 0904 | Casing Diameter: (2") 4" 6" (Gal./Ft.: 0.16 0.65 1.47) |
| Total Depth of Well: 100.02 / Well Volume: 1.34 | Sample Containers: 3 VOAs + 1 Amber |
| Sampler(s): CT | Analysis: |
| Sample I.D.: MW 1 012505 | |

## Stabilization Data

| Time | Volume (gallons) | pH | Temp. | Cond µS/cm X | Color/ Turbidity | Notes |
|---|---|---|---|---|---|---|
| 0852 | 0 | 6.67 | 21.3 | 716 | Clear | no odor |
| 0856 | 1.5 | 6.75 | 20.3 | 677 | Cloudy/Brown | " |
| 0859 | 3 | 6.71 | 21.7 | 661 | " | " |
| 0903 | 4.5 | 6.75 | 21.6 | 658 | " | " |
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|---|---|---|---|
| Purge Method: | DISP Bailer | | |
| Sample Method: | Same | Well Integrity: | |
| Sample Time: | 0907 | Dissolved $O_2$: | |
| | | | |
| | | | |

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# Monitoring Well Field Log

## Well Data

| | |
|---|---|
| Project Name: MBP / Linden | Project No.: *AGE-NC-* / Date: 1/25/05 |
| Pre-Purge DTW: 91.44 Time: 0823<br>Post-Purge DTW: 91.84 Time: 0932 | Well I.D.: MW2 |
| Total Depth of Well: 100.23 Well Volume: 1.40 | Casing Diameter: (2") 4" 6"<br>Gal./Ft.: 0.16 0.65 1.47 |
| Sampler(s): CT | Sample Containers: 3 VOAs + 1 Amber |
| Sample I.D.: MW2 / 012505 | Analysis: |

## Stabilization Data

| Time | Volume (gallons) | pH | Temp. | Cond µS/cm X____ | Color/ Turbidity | Notes |
|---|---|---|---|---|---|---|
| 0920 | 0 | 6.75 | 21.4 | 538 | Clear | no odor |
| 0924 | 1.5 | 6.76 | 21.4 | 542 | Cloudy/brown | " " |
| 0928 | 3 | 6.74 | 21.5 | 541 | " | " |
| 0931 | 4.5 | 6.79 | 21.5 | 529 | " | " |
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|---|---|---|---|
| Purge Method: | DISP. Bailer | | |
| Sample Method: | Same | Well Integrity: | |
| Sample Time: | 0935 | Dissolved $O_2$: | |
| | | | |
| | | | |

Version 3.0/0898/REM

*Advanced*
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*4005 North Wilson Way, Stockton, CA 95205 • (209) 467-1006 • Fax (209) 467-1118*

# Monitoring Well Field Log

## Well Data

| | | | |
|---|---|---|---|
| Project Name: MBP Linden | | Project No.: *AGE-NC-* | Date: 1/25/05 |
| Pre-Purge DTW: 91.29 | Time: 0829 | Well I.D.: MW3 | |
| Post-Purge DTW: 91.67 | Time: 0955 | | |
| Total Depth of Well: 101.10 | Well Volume: 1.56 | Casing Diameter: (2") 4" 6" | |
| | | Gal./Ft.: 0.16 0.65 1.47 | |
| Sampler(s): CT | | Sample Containers: | |
| Sample I.D.: MW3/012505 | | Analysis: | |

## Stabilization Data

| Time | Volume (gallons) | pH | Temp. | Cond µS/cm X | Color/ Turbidity | Notes |
|---|---|---|---|---|---|---|
| 0942 | 0 | 6.84 | 21.0 | 546 | Clear | no odor |
| 0946 | 2 | 6.83 | 21.2 | 551 | Cloudy/Tan | " |
| 0950 | 4 | 6.84 | 21.2 | 558 | " | " |
| 0953 | 5 | 6.85 | 21.2 | 550 | " | " |
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|---|---|---|---|
| Purge Method: | DSP Bailer | | |
| Sample Method: | Same | Well Integrity: | |
| Sample Time: | 0959 | Dissolved $O_2$: | |
| | | | |
| | | | |

Version 3.040898/REM

# APPENDIX C

# CAL TECH Environmental Laboratories

6814 Rosecrans Avenue, Paramount, CA 90723-3146
Telephone: (562) 272-2700 Fax: (562) 272-2789


## ANALYTICAL RESULTS*

| | |
|---|---|
| **CTEL Project No:** | CT214-0412192 |
| **Client Name:** | Advanced Geo Environmental, Inc. |
| | 837 Shaw Road |
| | Stockton, CA 95215 |
| **Attention:** | Mr. Bill Little |

**Phone:(209) 467-1006**
**Fax: (209) 467-1118**

| | |
|---|---|
| **Project ID:** | Global ID: T0607700895 |
| **Project Name:** | MBP – Linden |
| **Date Sampled:** | 12/22/04 @ 11:54 am |
| **Date Received:** | 12/23/04 @ 09:00 am |
| **Date Analyzed** | 12/23/04 |

**Matrix: Air**

| **Laboratory ID:** | 0412-192-1 | 0412-192-2 | **Method** | **Units:** | **Detection Limit** |
|---|---|---|---|---|---|
| **Client Sample ID:** | Influent | Effluent | | | |
| **Dilution** | 1 | 1 | | | |
| MtBE | 12 | ND | SW846 8021 | ug/L | 0.5 |
| Benzene | ND | ND | SW846 8021 | ug/L | 0.5 |
| Toluene | 1.7 | ND | SW846 8021 | ug/L | 0.5 |
| Ethylbenzene | 2.6 | ND | SW846 8021 | ug/L | 0.5 |
| Total Xylene | 25 | 4.0 | SW846 8021 | ug/L | 1 |
| **TPH - Gasoline** | 650 | 120 | EPA 8015M | ug/L | 50 |

ND = Not Detected at the indicated Detection Limit

| *SURROGATE SPIKE* | % SURROGATE RECOVERY | | Control Limit |
|---|---|---|---|
| a,a,a - TFT | 97 | 103 | 70-130 |
| Bromofluorobenzene | 102 | 106 | 70-130 |

Greg Tejirian
Laboratory Director

*The results are base upon the sample received.

***Cal Tech Environmental Laboratories, Inc. ELAP ID #: 2424***

CAL TECH Environmental Laboratories
6814 Rosecrans Avenue, Paramount, CA 90723-3146
Telephone: (562) 272-2700 Fax: (562) 272-2789

# QA/QC Report

Method: 8015M / 8021B

Matrix: Water

Date Analyzed: 12/23/04

Date Extracted: 12/23/04

| Perimeters | Conc. ug/L | | Spike | Recovery % | | Control Limits | | RPD |
|---|---|---|---|---|---|---|---|---|
| | LCS | LCSD | Added | LCS | LCSD | Rec. | RPD | |
| Benzene | 40 | 42 | 50 | 80 | 84 | 70-130 | 20 | 4 |
| Toluene | 41 | 42 | 50 | 82 | 84 | 70-130 | 20 | 2 |
| Ethybenzene | 45 | 47 | 50 | 90 | 94 | 70-130 | 20 | 4 |
| Xylenes | 90 | 93 | 100 | 90 | 93 | 70-130 | 20 | 3 |
| TPH - Gasoline | 1027 | 1051 | 1000 | 103 | 105 | 70-130 | 20 | 2 |

LCS: Laboratory Control Standard
LCSD: Laboratory Control Standard Duplicate

RPD: Relative Percent Difference of LCS and LCSD

## Method Blank

| Perimeters | Method Blank | Units | Det. Limit |
|---|---|---|---|
| MTBE | ND | ug/L | 0.5 |
| Benzene | ND | ug/L | 0.5 |
| Toluene | ND | ug/L | 0.5 |
| Ethybenzene | ND | ug/L | 0.5 |
| Xylenes | ND | ug/L | 1 |
| TPH - Gasoline | ND | ug/L | 50 |

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# CHAIN OF CUSTODY RECORD

Date 12/22/04 Page 1 of 1

12-192

Client Mel Bohrides Retro

Project Manager Bill Little

Phone Number (209) 467 1006

Samplers: (Signature) Rick May

Project Name MBP / Linden

Tests Required

Invoice: AGE ☑ Client ☐

| Sample Number | Location Description | Date | Time | Sample Type: Water Comp. | Sample Type: Water Grab. | Sample Type: Air | Solid | No. of Conts. | TBE-G | BTEX/MTBE | | | | | | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Influent | | 12/22/04 | 1154 | | | X | | 1 | X | X | | | | | | |
| Effluent | | 12/22/04 | 1156 | | | X | | 1 | X | X | | | | | | |
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Relinquished by: (Signature) Rick May — Received by: (Signature) — Date/Time 12/22/04 1800

Relinquished by: (Signature) — Received by: (Signature) — Date/Time

Relinquished by: (Signature) — Received by Mobile Laboratory for field analysis: (Signature) — Date/Time

Dispatched by: (Signature) — Date/Time — Received for Laboratory by: R. Tyhurst STAT — Date/Time 12-23-04 9:00

Method of Shipment: Cal Overnight — Laboratory Name Cal Tech

Special Instructions: — I hereby authorize the performance of the above indicated work. Rick May

CAL TECH Environmental Laboratories
6814 Rosecrans Avenue, Paramount, CA 90723-3146
Telephone: (562) 272-2700 Fax: (562) 272-2789

# ANALYTICAL RESULTS*

**CTEL Project No:** CT214-0501132
**Client Name:** Advanced Geo Environmental, Inc.
837 Shaw Road
Stockton, CA 95215
**Phone:(209) 467-1006**
**Fax: (209) 467-1118**
**Attention:** Mr. Bill Little

**Project ID:** Global ID: T0607700895
**Project Name:** MBP – Linden

**Date Sampled:** 01/21/05 @ 12:10 p.m.
**Date Received:** 01/22/05 @ 09:00 am
**Date Analyzed** 01/22/05
**Matrix: Air**

| **Laboratory ID:** | 0501-132-1 | 0501-132-2 | **Method** | **Units:** | **Detection Limit** |
|---|---|---|---|---|---|
| **Client Sample ID:** | Influent | Effluent | | | |
| **Dilution** | 1 | 1 | | | |
| MtBE | 35 | ND | SW846 8021B | ug/L | 0.5 |
| Benzene | ND | ND | SW846 8021B | ug/L | 0.5 |
| Toluene | 2.0 | 1.4 | SW846 8021B | ug/L | 0.5 |
| Ethylbenzene | 3.8 | ND | SW846 8021B | ug/L | 0.5 |
| Total Xylene | 41 | 5.0 | SW846 8021B | ug/L | 1 |
| **TPH - Gasoline** | 450 | ND | EPA 8015M | ug/L | 50 |

ND = Not Detected at the indicated Detection Limit

| *SURROGATE SPIKE* | % SURROGATE RECOVERY | | Control Limit |
|---|---|---|---|
| a,a,a - TFT | 84 | 75 | 70-130 |
| Bromofluorobenzene | 82 | 83 | 70-130 |

Greg Tejirian
Laboratory Director

*The results are base upon the sample received.

***Cal Tech Environmental Laboratories, Inc. ELAP ID #: 2424***

CAL TECH Environmental Laboratories
6814 Rosecrans Avenue, Paramount, CA 90723-3146
Telephone: (562) 272-2700 Fax: (562) 272-2789

# QA/QC Report

Method: 8015M / 8021B

Matrix: Water

Date Analyzed: 1/22/05

Date Extracted: 1/22/05

| Perimeters | Conc. | ug/L | Spike | Recovery | % | Control | Limits | RPD |
|---|---|---|---|---|---|---|---|---|
| | LCS | LCSD | Added | LCS | LCSD | Rec. | RPD | |
| Benzene | 44 | 42 | 50 | 88 | 84 | 70-130 | 20 | 4 |
| Toluene | 43 | 43 | 50 | 86 | 86 | 70-130 | 20 | 0 |
| Ethybenzene | 47 | 45 | 50 | 94 | 90 | 70-130 | 20 | 4 |
| Xylenes | 92 | 88 | 100 | 92 | 88 | 70-130 | 20 | 4 |
| TPH - Gasoline | 1040 | 992 | 1000 | 104 | 99 | 70-130 | 20 | 5 |

LCS: Laboratory Control Standard
LCSD: Laboratory Control Standard Duplicate

RPD: Relative Percent Difference of LCS and LCSD

## Method Blank

| Perimeters | Method Blank | Units | Det. Limit |
|---|---|---|---|
| MTBE | ND | ug/L | 0.5 |
| Benzene | ND | ug/L | 0.5 |
| Toluene | ND | ug/L | 0.5 |
| Ethybenzene | ND | ug/L | 0.5 |
| Xylenes | ND | ug/L | 1 |
| TPH - Gasoline | ND | ug/L | 50 |

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# CHAIN OF CUSTODY RECORD

Date 1/21/05 Page 1 of 1

01-132

Client Mel Bakides Petro.

Project Manager Bill Little

Phone Number (209) 467 1006

Samplers: (Signature) Rel Mart

Project Name MBP / Linden

Tests Required: TPH-G, BTEX/MTBE

Invoice: AGE ☑ Client ☐

| Sample Number | Location Description | Date | Time | Sample Type: Water Comp. | Water Grab. | Air | Solid | No. of Conts. | TPH-G | BTEX/MTBE | | | | | | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Influent | | 1/21/05 | 1210 | | | X | | 1 | X | X | | | | | | |
| Effluent | | 1/21/05 | 1214 | | | X | | 1 | X | X | | | | | | |
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Relinquished by: (Signature) Rel Mart — Received by: (Signature) — Date/Time 1/21/05 1630

Relinquished by: (Signature) — Received by: (Signature) — Date/Time

Relinquished by: (Signature) — Received by Mobile Laboratory for field analysis: (Signature) — Date/Time

Dispatched by: (Signature) — Date/Time — Received for Laboratory by: R. Jayhawker — Date/Time 1-22-05 / 9:00

Method of Shipment: Cal Overnight — Laboratory Name: Cal Tech

Special Instructions: STAT

I hereby authorize the performance of the above indicated work. Rel Mart

# CAL TECH Environmental Laboratories

6814 Rosecrans Avenue, Paramount, CA 90723-3146
Telephone: (562) 272-2700 Fax: (562) 272-2789


## ANALYTICAL RESULTS*

| | |
|---|---|
| **CTEL Project No:** | CT214-0502102 |
| **Client Name:** | Advanced Geo Environmental, Inc. |
| | 837 Shaw Road |
| | Stockton, CA 95215 |
| **Attention:** | Mr. Bill Little |

**Phone:(209) 467-1006**
**Fax: (209) 467-1118**

| | |
|---|---|
| **Project ID:** | Global ID: T0607700895 |
| **Project Name:** | MBP – Linden |
| **Date Sampled:** | 02/16/05 @ 15:40 p.m. |
| **Date Received:** | 02/17/05 @ 08:30 am |
| **Date Analyzed** | 02/17/05 |

**Matrix: Air**

| **Laboratory ID:** | 0502-102-1 | 0502-102-2 | **Method** | **Units:** | **Detection Limit** |
|---|---|---|---|---|---|
| **Client Sample ID:** | Influent | Effluent | | | |
| **Dilution** | 1 | 1 | | | |
| MtBE | 180 | ND | SW846 8021B | ug/L | 0.5 |
| Benzene | 11 | ND | SW846 8021B | ug/L | 0.5 |
| Toluene | 23 | ND | SW846 8021B | ug/L | 0.5 |
| Ethylbenzene | ND | ND | SW846 8021B | ug/L | 0.5 |
| Total Xylene | ND | ND | SW846 8021B | ug/L | 1 |
| **TPH - Gasoline** | 820 | ND | EPA 8015M | ug/L | 50 |

ND = Not Detected at the indicated Detection Limit

| *SURROGATE SPIKE* | % SURROGATE RECOVERY | | Control Limit |
|---|---|---|---|
| a,a,a - TFT | 84 | 86 | 70-130 |
| Bromofluorobenzene | 98 | 101 | 70-130 |

Greg Tejirian
Laboratory Director

*The results are base upon the sample received.

***Cal Tech Environmental Laboratories, Inc. ELAP ID #: 2424***

CAL TECH Environmental Laboratories
6814 Rosecrans Avenue, Paramount, CA 90723-3146
Telephone: (562) 272-2700 Fax: (562) 272-2789

# QA/QC Report

Method: 8015M / 8021B

Matrix: Water

Date Analyzed: 2/17/05

Date Extracted: 2/17/05

| Perimeters | Conc. ug/L | | Spike | Recovery % | | Control Limits | | RPD |
|---|---|---|---|---|---|---|---|---|
| | LCS | LCSD | Added | LCS | LCSD | Rec. | RPD | |
| Benzene | 51 | 53 | 50 | 102 | 106 | 70-130 | 20 | 4 |
| Toluene | 46 | 49 | 50 | 92 | 98 | 70-130 | 20 | 6 |
| Ethybenzene | 47 | 50 | 50 | 94 | 100 | 70-130 | 20 | 6 |
| Xylenes | 97 | 104 | 100 | 97 | 104 | 70-130 | 20 | 7 |
| TPH - Gasoline | 1065 | 1099 | 1000 | 107 | 110 | 70-130 | 20 | 3 |

LCS: Laboratory Control Standard
LCSD: Laboratory Control Standard Duplicate

RPD: Relative Percent Difference of LCS and LCSD

## Method Blank

| Perimeters | Method Blank | Units | Det. Limit |
|---|---|---|---|
| MTBE | ND | ug/L | 0.5 |
| Benzene | ND | ug/L | 0.5 |
| Toluene | ND | ug/L | 0.5 |
| Ethybenzene | ND | ug/L | 0.5 |
| Xylenes | ND | ug/L | 1 |
| TPH - Gasoline | ND | ug/L | 50 |

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# CHAIN OF CUSTODY RECORD

Date 2/16/05 Page 1 of 1

02-102

Client MBP / Linden
Mel Bakides Petro

Project Manager Bill Little

Phone Number (209) 467 1006

Samplers: (Signature)

Project Name MBP / Linden

Tests Required

Invoice:
AGE ☒
Client ☐

| Sample Number | Location Description | Date | Time | Sample Type: Water Comp. | Water Grab. | Air | Solid | No. of Conts. | TPH-G | BTEX/MTBE | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Influent | | 2/16/05 | 1540 | | | + | | 1 | XX | | |
| Effluent | | 2/16/05 | 1537 | | | + | | 1 | XX | | |

Relinquished by: (Signature)

Received by: (Signature)

Date/Time 2/16/05 1630

Relinquished by: (Signature)

Received by: (Signature)

Date/Time

Relinquished by: (Signature)

Received by Mobile Laboratory for field analysis: (Signature)

Date/Time

Dispatched by: (Signature)

Date/Time

Received for Laboratory by: R. Taylor

Date/Time 2-17-05 / 8:30

Method of Shipment: Cal Overnight

Laboratory Name Cal Tech

Special Instructions:

I hereby authorize the performance of the above indicated work.

CAL TECH Environmental Laboratories
6814 Rosecrans Avenue, Paramount, CA 90723-3146
Telephone: (562) 272-2700 Fax: (562) 272-2789

# ANALYTICAL RESULTS*

| | |
|---|---|
| **CTEL Project No:** | CT214-0503081 |
| **Client Name:** | Advanced Geo Environmental, Inc. |
| | 837 Shaw Road |
| | Stockton, CA 95215 |
| **Attention:** | Mr. Bill Little |

**Phone:(209) 467-1006**
**Fax: (209) 467-1118**

| | |
|---|---|
| **Project ID:** | Global ID: T0607700895 |
| **Project Name:** | MBP – Linden |
| **Date Sampled:** | 03/08/05 @ 08:12 am |
| **Date Received:** | 03/09/05 @ 09:00 am |
| **Date Analyzed** | 03/09/05 |

**Matrix: Air**

| **Laboratory ID:** | 0503-081-1 | 0503-081-2 | **Method** | **Units:** | **Detection Limit** |
|---|---|---|---|---|---|
| **Client Sample ID:** | Influent-V | Effluent-V | | | |
| **Dilution** | 1 | 1 | | | |
| MtBE | 7.6 | ND | SW846 8260B | ug/L | 0.5 |
| Benzene | ND | ND | SW846 8260B | ug/L | 0.5 |
| Toluene | 35 | 7.5 | SW846 8260B | ug/L | 0.5 |
| Ethylbenzene | 2.2 | ND | SW846 8260B | ug/L | 0.5 |
| Total Xylene | 12 | 5.2 | SW846 8260B | ug/L | 1 |
| **TPH - Gasoline** | 650 | 110 | EPA 8015M | ug/L | 50 |

ND = Not Detected at the indicated Detection Limit

| *SURROGATE SPIKE* | % SURROGATE RECOVERY | | Control Limit |
|---|---|---|---|
| Dibromofluoromethane | 97 | 91 | 70-130 |
| 1,2 Dichloroethaned4 | 98 | 92 | 70-130 |
| Toluene-d8 | 101 | 105 | 70-130 |
| Bromofluorobenzene | 106 | 104 | 70-130 |

Greg Tejirian
Laboratory Director

*The results are base upon the sample received.

***Cal Tech Environmental Laboratories, Inc. ELAP ID #: 2424***

CAL TECH Environmental Laboratories
6814 Rosecrans Avenue, Paramount, CA 90723-3146
Telephone: (562) 272-2700 Fax: (562) 272-2789

# QA/QC Report

Method: 8015M

Matrix: Water

Date Analyzed: 3/9/05

Date Extracted: 3/9/05

| Perimeters | Conc. ug/L | | Spike Added | Recovery % | | Control Limits | | RPD |
|---|---|---|---|---|---|---|---|---|
| | LCS | LCSD | | LCS | LCSD | Rec. | RPD | |
| TPH - Gasoline | 1065 | 1037 | 1000 | 107 | 104 | 70-130 | 20 | 3 |

| Perimeters | Method Blank | Units | Det. Limit |
|---|---|---|---|
| TPH - Gasoline | ND | ug/L | 50 |

LCS: Laboratory Control Standard
LCSD: Laboratory Control Standard Duplicate

RPD: Relative Percent Difference of LCS and LCSD

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# QA/QC Report

Method: 8260B

Matrix: Water

Date Analyzed: 3/9/05

Date Extracted: 3/9/05

| Perimeters | Conc. ug/L | | Spike Added | Recovery % | | Control Limits | | RPD |
|---|---|---|---|---|---|---|---|---|
| | LCS | LCSD | | LCS | LCSD | Rec. | RPD | |
| 1,1-Dichloroethene | 42 | 43 | 50 | 84 | 86 | 70-130 | 20 | 2 |
| Benzene | 44 | 46 | 50 | 88 | 92 | 70-130 | 20 | 4 |
| Trichloroethene | 45 | 47 | 50 | 90 | 94 | 70-130 | 20 | 4 |
| Toluene | 41 | 43 | 50 | 82 | 86 | 70-130 | 20 | 4 |
| Chlorobenzene | 43 | 47 | 50 | 86 | 94 | 70-130 | 20 | 8 |
| m,p-Xylenes | 88 | 94 | 100 | 88 | 94 | 70-130 | 20 | 6 |

LCS: Laboratory Control Standard
LCSD: Laboratory Control Standard Duplicate

RPD: Relative Percent Difference of LCS and LCSD

| Perimeters | Method Blank | Units | Det. Limit |
|---|---|---|---|
| 1,1-Dichloroethene | ND | ug/L | 1 |
| Benzene | ND | ug/L | 0.5 |
| Trichloroethene | ND | ug/L | 0.5 |
| Toluene | ND | ug/L | 0.5 |
| Chlorobenzene | ND | ug/L | 0.5 |
| m,p-Xylenes | ND | ug/L | 0.6 |
| MTBE | ND | ug/L | 1 |
| TBA | ND | ug/L | 10 |
| DIPE | ND | ug/L | 1 |
| ETBE | ND | ug/L | 1 |
| TAME | ND | ug/L | 1 |
| 1,2-Dichloroethane | ND | ug/L | 0.5 |
| EDB | ND | ug/L | 0.5 |
| Ethylbenzene | ND | ug/L | 0.5 |
| o-Xylene | ND | ug/L | 0.6 |
| TCE | ND | ug/L | 1 |
| PCE | ND | ug/L | 1 |

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# CHAIN OF CUSTODY RECORD

Date 3/8/05 Page 1 of 1

03041

Client Mel Bakides Petro.

Project Manager Bill Little

Phone Number (209) 467 1006

Samplers: (Signature) Rick Mayo

Project Name MBP/Linden

Tests Required

Invoice: AGE ☑ Client ☐

| Sample Number | Location Description | Date | Time | Sample Type: Water Comp. | Sample Type: Water Grab. | Sample Type: Air | Solid | No. of Conts. | TPH-G | BTEX/MTBE | | | | | | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Influent | Vapor | 3/8/05 | 812 | | | + | | 1 | + | + | | | | | | |
| Effluent | Vapor | 3/8/05 | 814 | | | + | | 1 | + | + | | | | | | |
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Relinquished by: (Signature) Rick Mayo — Received by: (Signature) — Date/Time 3/8/05 1600

Relinquished by: (Signature) — Received by: (Signature) — Date/Time

Relinquished by: (Signature) — Received by Mobile Laboratory for field analysis: (Signature) — Date/Time

Dispatched by: (Signature) — Date/Time — Received for Laboratory by: STAT R. Johnson — Date/Time 3-9-05 / 8:00

Method of Shipment: Cal Overnight — Laboratory Name Cal Tech

Special Instructions: — I hereby authorize the performance of the above indicated work. Rick Mayo

CAL TECH Environmental Laboratories
6814 Rosecrans Avenue, Paramount, CA 90723-3146
Telephone: (562) 272-2700 Fax: (562) 272-2789

# ANALYTICAL RESULTS*

| | |
|---|---|
| **CTEL Project No:** | CT214-0503243 |
| **Client Name:** | Advanced Geo Environmental, Inc. |
| | 837 Shaw Road |
| | Stockton, CA 95215 |
| **Attention:** | Mr. Bill Little |

**Phone:(209) 467-1006**
**Fax: (209) 467-1118**

| | |
|---|---|
| **Project ID:** | Global ID: T0607700895 |
| **Project Name:** | MBP – Linden SVE |
| **Date Sampled:** | 03/23/05 @ 15:15 p.m. |
| **Date Received:** | 03/24/05 @ 09:00 am |
| **Date Analyzed** | 03/24/05 |

**Matrix: Air**

| **Laboratory ID:** | 0503-243-1 | | | |
|---|---|---|---|---|
| **Client Sample ID:** | Effluent-V | **Method** | **Units:** | **Detection Limit** |
| **Dilution** | 1 | | | |
| MtBE | ND | SW846 8260B | ug/L | 0.5 |
| Benzene | ND | SW846 8260B | ug/L | 0.5 |
| Toluene | ND | SW846 8260B | ug/L | 0.5 |
| Ethylbenzene | ND | SW846 8260B | ug/L | 0.5 |
| Total Xylene | ND | SW846 8260B | ug/L | 1 |
| **TPH - Gasoline** | ND | EPA 8015M | ug/L | 50 |

ND = Not Detected at the indicated Detection Limit

| *SURROGATE SPIKE* | % SURROGATE RECOVERY | Control Limit |
|---|---|---|
| Dibromofluoromethane | 76 | 70-130 |
| 1,2 Dichloroethaned4 | 83 | 70-130 |
| Toluene-d8 | 97 | 70-130 |
| Bromofluorobenzene | 88 | 70-130 |

Greg Tejirian
Laboratory Director

*The results are base upon the sample received.

***Cal Tech Environmental Laboratories, Inc. ELAP ID #: 2424***

CAL TECH Environmental Laboratories
6814 Rosecrans Avenue, Paramount, CA 90723-3146
Telephone: (562) 272-2700 Fax: (562) 272-2789

# QA/QC Report

Method: 8015M

Matrix: Water

Date Analyzed: 3/24/05

Date Extracted: 3/24/05

| Perimeters | Conc. ug/L | | Spike Added | Recovery % | | Control Limits | | RPD |
|---|---|---|---|---|---|---|---|---|
| | LCS | LCSD | | LCS | LCSD | Rec. | RPD | |
| TPH - Gasoline | 1023 | 1082 | 1000 | 102 | 108 | 70-130 | 20 | 6 |

| Perimeters | Method Blank | Units | Det. Limit |
|---|---|---|---|
| TPH - Gasoline | ND | ug/L | 50 |

LCS: Laboratory Control Standard
LCSD: Laboratory Control Standard Duplicate

RPD: Relative Percent Difference of LCS and LCSD

CAL TECH Environmental Laboratories
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Telephone: (562) 272-2700 Fax: (562) 272-2789

# QA/QC Report

Method: 8260B

Matrix: Water

Date Analyzed: 3/24/05

Date Extracted: 3/24/05

| Perimeters | Conc. ug/L | | Spike Added | Recovery % | | Control Limits | | RPD |
|---|---|---|---|---|---|---|---|---|
| | LCS | LCSD | | LCS | LCSD | Rec. | RPD | |
| 1,1-Dichloroethene | 42 | 44 | 50 | 84 | 88 | 70-130 | 20 | 4 |
| Benzene | 47 | 47 | 50 | 94 | 94 | 70-130 | 20 | 0 |
| Trichloroethene | 50 | 49 | 50 | 100 | 98 | 70-130 | 20 | 2 |
| Toluene | 49 | 50 | 50 | 98 | 100 | 70-130 | 20 | 2 |
| Chlorobenzene | 48 | 50 | 50 | 96 | 100 | 70-130 | 20 | 4 |
| m,p-Xylenes | 93 | 99 | 100 | 93 | 99 | 70-130 | 20 | 6 |

LCS: Laboratory Control Standard
LCSD: Laboratory Control Standard Duplicate

RPD: Relative Percent Difference of LCS and LCSD

| Perimeters | Method Blank | Units | Det. Limit |
|---|---|---|---|
| 1,1-Dichloroethene | ND | ug/L | 1 |
| Benzene | ND | ug/L | 0.5 |
| Trichloroethene | ND | ug/L | 0.5 |
| Toluene | ND | ug/L | 0.5 |
| Chlorobenzene | ND | ug/L | 0.5 |
| m,p-Xylenes | ND | ug/L | 0.6 |
| MTBE | ND | ug/L | 1 |
| TBA | ND | ug/L | 10 |
| DIPE | ND | ug/L | 1 |
| ETBE | ND | ug/L | 1 |
| TAME | ND | ug/L | 1 |
| 1,2-Dichloroethane | ND | ug/L | 0.5 |
| EDB | ND | ug/L | 0.5 |
| Ethylbenzene | ND | ug/L | 0.5 |
| o-Xylene | ND | ug/L | 0.6 |
| Ethanol | ND | ug/L | 50 |
| Methanol | ND | ug/L | 1000 |

*Advanced*
GeoEnvironmental, Inc.
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# CHAIN OF CUSTODY RECORD

Date 3/23/15 Page 1 of 1

03-243

Client MBP- ALL

Project Manager Bill Little

Phone Number A3020

Samplers: (Signature) William Little

Project Name MBP- LINDEN SVE 3/22/15

Invoice: AGE ☑ Client ☐

| Sample Number | Location Description | Date | Time | Sample Type: Water Comp. | Sample Type: Water Grab. | Sample Type: Air | Solid | No. of Conts. | TPH-g | BTEX | | | | | | | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SVE Effluent | SVE Effluent | 3/23/15 | 3:15 PM | | | ✓ | | x | x | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
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| | | | | | | | | | | | | | | | | | |

Tests Required

Relinquished by: (Signature) William Little — Received by: (Signature) — Date/Time

Relinquished by: (Signature) — Received by: (Signature) — Date/Time

Relinquished by: (Signature) — Received by Mobile Laboratory for field analysis: (Signature) — Date/Time

Normal TAT

Dispatched by: (Signature) — Date/Time — Received for Laboratory by: R. Taylor — Date/Time 3-24-15/9:00

Method of Shipment: OVERNIGHT

Laboratory Name CAL Tech ENVRO Lab

Special Instructions:

I hereby authorize the performance of the above indicated work.

William Little

# APPENDIX D

# Soil-Vapor Extraction Volume-Mass Calculations

**Former Mel Bokides Petroleum - Linden**
**8203 East Highway 26, Stockton, California**

The hydrocarbon mass removed during the operating period can be calculated using the following equation: $M = C \bullet Q \bullet t$

where: M = cumulative mass recovered (kg)
C = vapor concentration ($kg/m^3$)
Q = extraction flow rate ($m^3/hr$)
t = operational period (hrs)

The calculations for the determination of volume and mass of hydrocarbons removed over the reporting period are provided below:

**11-17-04 to 12-21-04**

using: $C_{vapor}$ = (500+650 µg/l) ÷ 2 = 575 micrograms per liter
converted to 0.000575 $kg/m^3$
Q = 62 scfm (average) x 1.69 = 105 $m^3/hr$
t = 840 hours (sum of known operation)

0.000575 $kg/m^3$ • 105 $m^3/hr$ • 840 hours = 50.715 kg gasoline
50.715 kg gasoline • 2.205 lbs/kg = 111.8 lbs gasoline

to convert lbs gasoline to gallons gasoline, use 0.16 gal/lb:
111.8 lbs • 0.16 gal/lb = 17.89 gallons of gasoline

**12-21-04 to 01-21-05**

using: $C_{vapor}$ = (650+450 µg/l) ÷ 2 = 550 micrograms per liter
converted to 0.00055 $kg/m^3$
Q = 67 scfm (average) X 1.69 = 113 $m^3/hr$
t = 720 hours (sum of known operation)

0.000550 $kg/m^3$ • 113 $m^3/hr$ • 720 hours = 44.75 kg gasoline
44.75 kg gasoline • 2.205 lbs/kg = 98.67 lbs gasoline

to convert lbs gasoline to gallons gasoline, use 0.16 gal/lb:
98.67 lbs • 0.16 gal/lb = 15.79 gallons of gasoline

**01-21-05 to 02-18-05**

using: $C_{vapor}$ = (450+820 µg/l) ÷ 2 = 635 micrograms per liter
converted to 0.000635 kg/$m^3$
Q = 65 scfm (average) X 1.69 = 109.85 $m^3$/hr
t = 624 hours (sum of known operation)

0.000635 kg/$m^3$ • 109.85 $m^3$/hr • 624 hours = 43.53 kg gasoline
43.53 kg gasoline • 2.205 lbs/kg = 95.98 lbs gasoline

to convert lbs gasoline to gallons gasoline, use 0.16 gal/lb:
95.98 lbs • 0.16 gal/lb = 15.36 gallons of gasoline

**02-18-05 to 03-17-05**

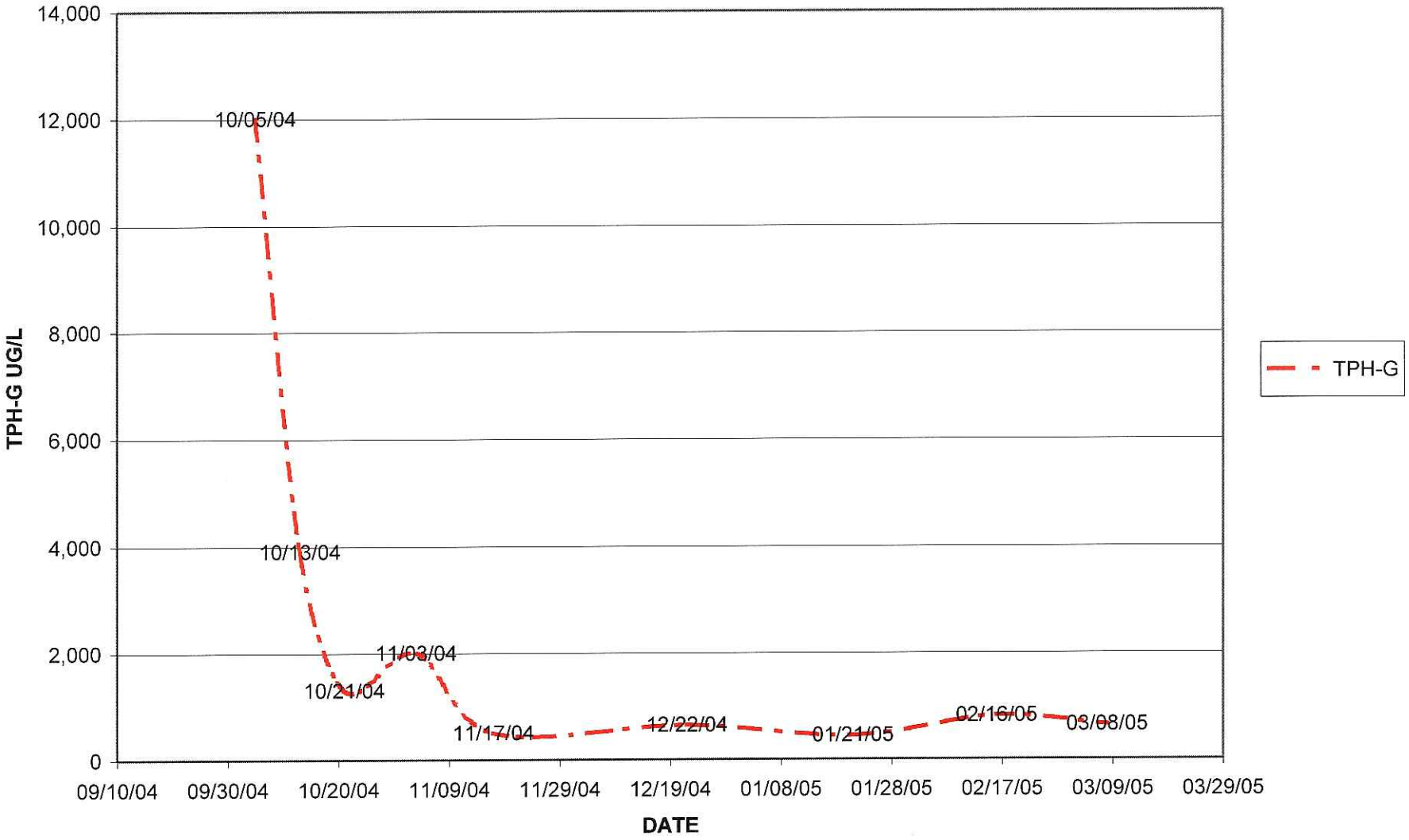
using: $C_{vapor}$ = (820+650 µg/l) ÷ 2 = 735 micrograms per liter
converted to 0.000735 kg/$m^3$
Q = 64 scfm (average) X 1.69 = 108 $m^3$/hr
t = 216 hours (sum of known operation)

0.000735 kg/$m^3$ • 108 $m^3$/hr • 216 hours = 17.14 kg gasoline
17.14 kg gasoline • 2.205 lbs/kg = 37.80 lbs gasoline

to convert lbs gasoline to gallons gasoline, use 0.16 gal/lb:
37.80 lbs • 0.16 gal/lb = 6.05 gallons of gasoline

Approximately 156.13 kg (344.25 pounds), or 55.09 gallons of hydrocarbons were extracted by the SVE system between 17 November 2004 and 17 March 2005. Approximately 1,138 lbs, or 182 gallons, of gasoline were extracted by the SVE system since 05 October 2004.

## SOIL VAPOR EXTRACTION TREND



# APPENDIX E

CAL TECH Environmental Laboratories
6814 Rosecrans Avenue, Paramount, CA 90723-3146
Telephone: (562) 272-2700 Fax: (562) 272-2789

# ANALYTICAL RESULTS*

| | |
|---|---|
| **CTEL Project No:** | CT214-0501144 |
| **Client Name:** | Advanced Geo Environmental, Inc. |
| | 837 Shaw Road |
| | Stockton, CA 95215 |
| **Attention:** | Mr. Bill Little |

**Phone:(209) 467-1006**
**Fax: (209) 467-1118**

| | |
|---|---|
| **Project ID:** | Global ID: T0607700895 |
| **Project Name:** | MBP / Linden |
| **Date Sampled:** | 01/25/05 @ 09:07 am |
| **Date Received:** | 01/26/05 @ 09:00 am |
| **Date Analyzed** | 01/28/05 |

**Matrix: Water**

| **Laboratory ID:** | 0501-144-1 | 0501-144-2 | 0501-144-3 | **Method** | **Units:** | **Detection Limit** |
|---|---|---|---|---|---|---|
| **Client Sample ID:** | MW1 | MW2 | MW3 | | | |
| **Dilution** | 1 | 1 | 1 | | | |
| **TPH - Gasoline** | ND | ND | ND | EPA 8015M | ug/L | 50 |
| **TPH – Diesel** | ND | ND | ND | EPA 8015M | ug/L | 50 |
| **VOC, 8260B** | | | | | | |
| **Dilution** | 1 | 1 | 1 | | | |
| Methyl-tert-butyl-ether(MtBE) | ND | ND | ND | SW846 8260B | ug/L | 1 |
| t-Butyl Alcohol (TBA) | ND | ND | ND | SW846 8260B | ug/L | 10 |
| Diisopropyl Ether (DIPE) | ND | ND | ND | SW846 8260B | ug/L | 1 |
| Ethyl-t-butyl ether (ETBE) | ND | ND | ND | SW846 8260B | ug/L | 1 |
| t-Amyl Methyl Ether (TAME) | ND | ND | ND | SW846 8260B | ug/L | 1 |
| 1,2-Dichloroethane | ND | ND | ND | SW846 8260B | ug/L | 0.5 |
| 1,2-Dibromoethane(EDB) | ND | ND | ND | SW846 8260B | ug/L | 0.5 |
| Benzene | ND | ND | ND | SW846 8260B | ug/L | 0.5 |
| Toluene | ND | ND | ND | SW846 8260B | ug/L | 0.5 |
| Ethylbenzene | ND | ND | ND | SW846 8260B | ug/L | 0.5 |
| m,p-Xylene | ND | ND | ND | SW846 8260B | ug/L | 0.6 |
| o-Xylene | ND | ND | ND | SW846 8260B | ug/L | 0.6 |

ND = Not Detected at the indicated Detection Limit

| *SURROGATE SPIKE* | % SURROGATE RECOVERY | | | Control Limit |
|---|---|---|---|---|
| Dibromofluoromethane | 73 | 79 | 76 | 70-130 |
| 1,2 Dichloroethaned4 | 87 | 81 | 83 | 70-130 |
| Toluene-d8 | 94 | 91 | 87 | 70-130 |
| Bromofluorobenzene | 82 | 85 | 85 | 70-130 |

Greg Tejirian
Laboratory Director

*The results are base upon the sample received.

***Cal Tech Environmental Laboratories, Inc. ELAP ID #: 2424***

CAL TECH Environmental Laboratories
6814 Rosecrans Avenue, Paramount, CA 90723-3146
Telephone: (562) 272-2700 Fax: (562) 272-2789

# QA/QC Report

Method: 8015M

Matrix: Water

Date Analyzed: 1/28/05

Date Extracted: 1/28/05

| Perimeters | Conc. ug/L | | Spike | Recovery % | | Control Limits | | RPD |
|---|---|---|---|---|---|---|---|---|
| | LCS | LCSD | Added | LCS | LCSD | Rec. | RPD | |
| TPH - Gasoline | 1100 | 1052 | 1000 | 110 | 105 | 70-130 | 20 | 5 |
| TPH - Diesel | 1966 | 1857 | 2000 | 98 | 93 | 70-130 | 20 | 5 |

| Perimeters | Method Blank | Units | Det. Limit |
|---|---|---|---|
| TPH - Gasoline | ND | ug/L | 50 |
| TPH - Diesel | ND | ug/L | 50 |

LCS: Laboratory Control Standard
LCSD: Laboratory Control Standard Duplicate

RPD: Relative Percent Difference of LCS and LCSD

CAL TECH Environmental Laboratories
6814 Rosecrans Avenue, Paramount, CA 90723-3146
Telephone: (562) 272-2700 Fax: (562) 272-2789

# QA/QC Report

Method: 8260B

Matrix: Water

Date Analyzed: 1/28/05

Date Extracted: 1/28/05

| Perimeters | Conc. | ug/L | Spike | Recovery | % | Control | Limits | RPD |
|---|---|---|---|---|---|---|---|---|
| | LCS | LCSD | Added | LCS | LCSD | Rec. | RPD | |
| 1,1-Dichloroethene | 43 | 42 | 50 | 86 | 84 | 70-130 | 20 | 2 |
| Benzene | 42 | 40 | 50 | 84 | 80 | 70-130 | 20 | 4 |
| Trichloroethene | 53 | 51 | 50 | 106 | 102 | 70-130 | 20 | 4 |
| Toluene | 44 | 42 | 50 | 88 | 84 | 70-130 | 20 | 4 |
| Chlorobenzene | 47 | 44 | 50 | 94 | 88 | 70-130 | 20 | 6 |
| m,p-Xylenes | 88 | 82 | 100 | 88 | 82 | 70-130 | 20 | 6 |

LCS: Laboratory Control Standard
LCSD: Laboratory Control Standard Duplicate

RPD: Relative Percent Difference of LCS and LCSD

| Perimeters | Method Blank | Units | Det. Limit |
|---|---|---|---|
| 1,1-Dichloroethene | ND | ug/L | 1 |
| Benzene | ND | ug/L | 0.5 |
| Trichloroethene | ND | ug/L | 0.5 |
| Toluene | ND | ug/L | 0.5 |
| Chlorobenzene | ND | ug/L | 0.5 |
| m,p-Xylenes | ND | ug/L | 0.6 |
| MTBE | ND | ug/L | 1 |
| TBA | ND | ug/L | 10 |
| DIPE | ND | ug/L | 1 |
| ETBE | ND | ug/L | 1 |
| TAME | ND | ug/L | 1 |
| 1,2-Dichloroethane | ND | ug/L | 0.5 |
| EDB | ND | ug/L | 0.5 |
| Ethylbenzene | ND | ug/L | 0.5 |
| o-Xylene | ND | ug/L | 0.6 |
| TCE | ND | ug/L | 1 |
| PCE | ND | ug/L | 1 |

Advanced
GeoEnvironmental, Inc.
837 Shaw Road - Stockton, California - 95215 - (209) 467-1006 - Fax (209) 467-1118

01-144

# CHAIN OF CUSTODY RECORD

Date 1/25/05 Page 1 of 1

Client MBP - Bill

Project Manager Bill Little

Phone Number 209-467-1006

Samplers: (Signature)

Project Name MBP Linden

Tests Required: RH-Grid; BTEX; Stoner Oxy's + EDB; 1,2 DCA

Invoice: AGE [X] Client [ ]

| Sample Number | Location Description | Date | Time | Sample Type: Water Comp. | Water Grab. | Air | Solid | No. of Conts. | RH-Grid | BTEX | Stoner Oxy's + EDB | 1,2 DCA | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW1/012505 | MW1 | 1/25/05 | 0907 | | X | | | 4 | X | X | X | X | |
| MW2/ | MW2 | ↓ | 0935 | | X | | | 4 | X | X | X | X | |
| MW3/ | MW3 | ↓ | 0959 | | X | | | 4 | X | X | X | X | |

Relinquished by: (Signature)

Received by: (Signature)

STAT

Date/Time 012505 1000

Relinquished by: (Signature)

Received by: (Signature)

Date/Time

Relinquished by: (Signature)

Received by Mobile Laboratory for field analysis: (Signature)

Date/Time

Dispatched by: (Signature)

Date/Time

Received for Laboratory by:

Date/Time 1/26/05 0900

Method of Shipment: cal overnight

Laboratory Name Cal Tech

Special Instructions: Need EDF

I hereby authorize the performance of the above indicated work.

# APPENDIX F

# Electronic Submittal Information

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## UPLOADING A GEO_WELL FILE

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**Your file has been successfully submitted!**

| | |
|---|---|
| **Submittal Title:** | **MBP Linden 1st Quarter 2005** |
| **Submittal Date/Time:** | **5/19/2005 4:47:46 PM** |
| **Confirmation Number:** | **9373844742** |

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CONTACT SITE ADMINISTRATOR.

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**Confirmation Number:** 4944995164
**Date/Time of Submittal:** 4/21/2005 11:53:04 PM
**Facility Global ID:** T0607700895
**Facility Name:** MBP LINDEN
**Submittal Title:** 03-23-2005 Remediation Vapor
**Submittal Type:** Remediation O & M Reports

**Click here to view the detections report for this upload.**

**MBP LINDEN**
8203 HWY 26 E
STOCKTON, CA 95206

**Regional Board - Case #: 391080**
CENTRAL VALLEY RWQCB (REGION 5S) - **(JLB)**
**Local Agency (lead agency) - Case #: 000691**
SAN JOAQUIN COUNTY LOP - **(ML)**

| CONF # | TITLE | QUARTER |
|---|---|---|
| 4944995164 | 03-23-2005 Remediation Vapor | Q1 2005 |

| SUBMITTED BY | SUBMIT DATE | STATUS |
|---|---|---|
| Christopher Miller | 4/21/2005 | PENDING REVIEW |

## SAMPLE DETECTIONS REPORT

| | |
|---|---|
| # FIELD POINTS SAMPLED | 1 |
| # FIELD POINTS WITH DETECTIONS | 0 |
| # FIELD POINTS WITH WATER SAMPLE DETECTIONS ABOVE MCL | 0 |
| SAMPLE MATRIX TYPES | AIR - UNK. ORIGIN |

## METHOD QA/QC REPORT

| | |
|---|---|
| METHODS USED | 8260FAB,M8015 |
| TESTED FOR REQUIRED ANALYTES? | N |

MISSING PARAMETERS NOT TESTED:
- 8260FAB REQUIRES ETBE TO BE TESTED
- 8260FAB REQUIRES TAME TO BE TESTED
- 8260FAB REQUIRES DIPE TO BE TESTED
- 8260FAB REQUIRES TBA TO BE TESTED
- 8260FAB REQUIRES DCA12 TO BE TESTED
- 8260FAB REQUIRES EDB TO BE TESTED
- 8260FAB REQUIRES ETHANOL TO BE TESTED

LAB NOTE DATA QUALIFIERS N

## QA/QC FOR 8021/8260 SERIES SAMPLES

| | |
|---|---|
| TECHNICAL HOLDING TIME VIOLATIONS | 0 |
| METHOD HOLDING TIME VIOLATIONS | 0 |
| LAB BLANK DETECTIONS ABOVE REPORTING DETECTION LIMIT | 0 |
| LAB BLANK DETECTIONS | 0 |
| DO ALL BATCHES WITH THE 8021/8260 SERIES INCLUDE THE FOLLOWING? | |
| - LAB METHOD BLANK | Y |
| - MATRIX SPIKE | N |
| - MATRIX SPIKE DUPLICATE | N |
| - BLANK SPIKE | N |
| - SURROGATE SPIKE - NON-STANDARD SURROGATE USED | N |

## WATER SAMPLES FOR 8021/8260 SERIES

| | |
|---|---|
| MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) % RECOVERY BETWEEN 65-135% | n/a |
| MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) RPD LESS THAN 30% | n/a |
| SURROGATE SPIKES % RECOVERY BETWEEN 85-115% | n/a |
| BLANK SPIKE / BLANK SPIKE DUPLICATES % RECOVERY BETWEEN 70-130% | n/a |

## SOIL SAMPLES FOR 8021/8260 SERIES

| | |
|---|---|
| MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) % RECOVERY BETWEEN 65-135% | n/a |
| MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) RPD LESS THAN 30% | n/a |
| SURROGATE SPIKES % RECOVERY BETWEEN 70-125% | n/a |
| BLANK SPIKE / BLANK SPIKE DUPLICATES % RECOVERY BETWEEN 70-130% | n/a |

## FIELD QC SAMPLES

| SAMPLE | COLLECTED | DETECTIONS > REPDL |
|---|---|---|
| QCTB SAMPLES | N | 0 |
| QCEB SAMPLES | N | 0 |
| QCAB SAMPLES | N | 0 |

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# Electronic Submittal Information

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**Confirmation Number:** 1886310756
**Date/Time of Submittal:** 5/19/2005 4:53:22 PM
**Facility Global ID:** T0607700895
**Facility Name:** MBP LINDEN
**Submittal Title:** Soil Vapor Samples March 2005
**Submittal Type:** Remediation O & M Reports

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**MBP LINDEN**
8203 HWY 26 E
STOCKTON, CA 95206

**Regional Board - Case #: 391080**
CENTRAL VALLEY RWQCB (REGION 5S) - **(JLB)**
**Local Agency (lead agency) - Case #: 000691**
SAN JOAQUIN COUNTY LOP - **(ML)**

| CONF # | TITLE | QUARTER |
|---|---|---|
| 1886310756 | Soil Vapor Samples March 2005 | Q1 2005 |

| SUBMITTED BY | SUBMIT DATE | STATUS |
|---|---|---|
| Christopher Miller | 5/19/2005 | PENDING REVIEW |

## SAMPLE DETECTIONS REPORT

| | |
|---|---|
| # FIELD POINTS SAMPLED | 2 |
| # FIELD POINTS WITH DETECTIONS | 2 |
| # FIELD POINTS WITH WATER SAMPLE DETECTIONS ABOVE MCL | 2 |
| SAMPLE MATRIX TYPES | AIR - UNK. ORIGIN |

## METHOD QA/QC REPORT

| | |
|---|---|
| METHODS USED | 8260FAB,M8015 |
| TESTED FOR REQUIRED ANALYTES? | N |
| MISSING PARAMETERS NOT TESTED: | |
| - 8260FAB REQUIRES ETBE TO BE TESTED | |
| - 8260FAB REQUIRES TAME TO BE TESTED | |
| - 8260FAB REQUIRES DIPE TO BE TESTED | |
| - 8260FAB REQUIRES TBA TO BE TESTED | |
| - 8260FAB REQUIRES DCA12 TO BE TESTED | |
| - 8260FAB REQUIRES EDB TO BE TESTED | |
| - 8260FAB REQUIRES ETHANOL TO BE TESTED | |
| LAB NOTE DATA QUALIFIERS | N |

## QA/QC FOR 8021/8260 SERIES SAMPLES

| | |
|---|---|
| TECHNICAL HOLDING TIME VIOLATIONS | 0 |
| METHOD HOLDING TIME VIOLATIONS | 0 |
| LAB BLANK DETECTIONS ABOVE REPORTING DETECTION LIMIT | 0 |
| LAB BLANK DETECTIONS | 0 |
| DO ALL BATCHES WITH THE 8021/8260 SERIES INCLUDE THE FOLLOWING? | |
| - LAB METHOD BLANK | Y |
| - MATRIX SPIKE | N |
| - MATRIX SPIKE DUPLICATE | N |
| - BLANK SPIKE | N |
| - SURROGATE SPIKE - NON-STANDARD SURROGATE USED | N |

## WATER SAMPLES FOR 8021/8260 SERIES

| | |
|---|---|
| MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) % RECOVERY BETWEEN 65-135% | n/a |
| MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) RPD LESS THAN 30% | n/a |
| SURROGATE SPIKES % RECOVERY BETWEEN 85-115% | n/a |
| BLANK SPIKE / BLANK SPIKE DUPLICATES % RECOVERY BETWEEN 70-130% | n/a |

## SOIL SAMPLES FOR 8021/8260 SERIES

| | |
|---|---|
| MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) % RECOVERY BETWEEN 65-135% | n/a |
| MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) RPD LESS THAN 30% | n/a |
| SURROGATE SPIKES % RECOVERY BETWEEN 70-125% | n/a |
| BLANK SPIKE / BLANK SPIKE DUPLICATES % RECOVERY BETWEEN 70-130% | n/a |

## FIELD QC SAMPLES

| SAMPLE | COLLECTED | DETECTIONS > REPDL |
|---|---|---|
| QCTB SAMPLES | N | 0 |
| QCEB SAMPLES | N | 0 |
| QCAB SAMPLES | N | 0 |

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# Electronic Submittal Information

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**Confirmation Number:** 3853462696
**Date/Time of Submittal:** 5/19/2005 4:51:47 PM
**Facility Global ID:** T0607700895
**Facility Name:** MBP LINDEN
**Submittal Title:** Soil Vapor Samples February 2005
**Submittal Type:** Remediation O & M Reports

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**MBP LINDEN**
8203 HWY 26 E
STOCKTON, CA 95206

**Regional Board - Case #: 391080**
CENTRAL VALLEY RWQCB (REGION 5S) - **(JLB)**
**Local Agency (lead agency) - Case #: 000691**
SAN JOAQUIN COUNTY LOP - **(ML)**

| CONF # | TITLE | QUARTER |
|---|---|---|
| 3853462696 | Soil Vapor Samples February 2005 | Q1 2005 |

| SUBMITTED BY | SUBMIT DATE | STATUS |
|---|---|---|
| Christopher Miller | 5/19/2005 | PENDING REVIEW |

## SAMPLE DETECTIONS REPORT

| | |
|---|---|
| # FIELD POINTS SAMPLED | 2 |
| # FIELD POINTS WITH DETECTIONS | 1 |
| # FIELD POINTS WITH WATER SAMPLE DETECTIONS ABOVE MCL | 1 |
| SAMPLE MATRIX TYPES | AIR - UNK. ORIGIN |

## METHOD QA/QC REPORT

| | |
|---|---|
| METHODS USED | M8015,SW8020F |
| TESTED FOR REQUIRED ANALYTES? | N |
| MISSING PARAMETERS NOT TESTED: | |
| - SW8020F REQUIRES ETBE TO BE TESTED | |
| - SW8020F REQUIRES TAME TO BE TESTED | |
| - SW8020F REQUIRES DIPE TO BE TESTED | |
| - SW8020F REQUIRES TBA TO BE TESTED | |
| - SW8020F REQUIRES DCA12 TO BE TESTED | |
| - SW8020F REQUIRES EDB TO BE TESTED | |
| LAB NOTE DATA QUALIFIERS | N |

## QA/QC FOR 8021/8260 SERIES SAMPLES

| | |
|---|---|
| TECHNICAL HOLDING TIME VIOLATIONS | 0 |
| METHOD HOLDING TIME VIOLATIONS | 0 |
| LAB BLANK DETECTIONS ABOVE REPORTING DETECTION LIMIT | 0 |
| LAB BLANK DETECTIONS | 0 |
| DO ALL BATCHES WITH THE 8021/8260 SERIES INCLUDE THE FOLLOWING? | |
| - LAB METHOD BLANK | Y |
| - MATRIX SPIKE | N |
| - MATRIX SPIKE DUPLICATE | N |
| - BLANK SPIKE | N |
| - SURROGATE SPIKE - NON-STANDARD SURROGATE USED | N |

## WATER SAMPLES FOR 8021/8260 SERIES

| | |
|---|---|
| MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) % RECOVERY BETWEEN 65-135% | n/a |
| MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) RPD LESS THAN 30% | n/a |
| SURROGATE SPIKES % RECOVERY BETWEEN 85-115% | n/a |
| BLANK SPIKE / BLANK SPIKE DUPLICATES % RECOVERY BETWEEN 70-130% | n/a |

## SOIL SAMPLES FOR 8021/8260 SERIES

| | |
|---|---|
| MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) % RECOVERY BETWEEN 65-135% | n/a |
| MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) RPD LESS THAN 30% | n/a |
| SURROGATE SPIKES % RECOVERY BETWEEN 70-125% | n/a |
| BLANK SPIKE / BLANK SPIKE DUPLICATES % RECOVERY BETWEEN 70-130% | n/a |

## FIELD QC SAMPLES

| SAMPLE | COLLECTED | DETECTIONS > REPDL |
|---|---|---|
| QCTB SAMPLES | N | 0 |
| QCEB SAMPLES | N | 0 |
| QCAB SAMPLES | N | 0 |

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**Confirmation Number:** 9352118849
**Date/Time of Submittal:** 2/17/2005 9:12:02 AM
**Facility Global ID:** T0607700895
**Facility Name:** MBP LINDEN
**Submittal Title:** 01-21-2005 Remediation-Vapor
**Submittal Type:** Remediation O & M Reports

**Click here to view the detections report for this upload.**

**MBP LINDEN**
8203 HWY 26 E
STOCKTON, CA 95206

**Regional Board - Case #: 391080**
CENTRAL VALLEY RWQCB (REGION 5S) - **(JLB)**
**Local Agency (lead agency) - Case #: 000691**
SAN JOAQUIN COUNTY LOP - **(ML)**

| CONF # | TITLE | QUARTER |
|---|---|---|
| 9352118849 | 01-21-2005 Remediation-Vapor | Q1 2005 |

| SUBMITTED BY | SUBMIT DATE | STATUS |
|---|---|---|
| Christopher Miller | 2/17/2005 | PENDING REVIEW |

## SAMPLE DETECTIONS REPORT

| | |
|---|---|
| # FIELD POINTS SAMPLED | 2 |
| # FIELD POINTS WITH DETECTIONS | 2 |
| # FIELD POINTS WITH WATER SAMPLE DETECTIONS ABOVE MCL | 1 |
| SAMPLE MATRIX TYPES | AIR - UNK. ORIGIN |

## METHOD QA/QC REPORT

| | |
|---|---|
| METHODS USED | M8015,SW8020F |
| TESTED FOR REQUIRED ANALYTES? | N |
| MISSING PARAMETERS NOT TESTED: | |
| - SW8020F REQUIRES ETBE TO BE TESTED | |
| - SW8020F REQUIRES TAME TO BE TESTED | |
| - SW8020F REQUIRES DIPE TO BE TESTED | |
| - SW8020F REQUIRES TBA TO BE TESTED | |
| - SW8020F REQUIRES DCA12 TO BE TESTED | |
| - SW8020F REQUIRES EDB TO BE TESTED | |
| LAB NOTE DATA QUALIFIERS | N |

## QA/QC FOR 8021/8260 SERIES SAMPLES

| | |
|---|---|
| TECHNICAL HOLDING TIME VIOLATIONS | 0 |
| METHOD HOLDING TIME VIOLATIONS | 0 |
| LAB BLANK DETECTIONS ABOVE REPORTING DETECTION LIMIT | 0 |
| LAB BLANK DETECTIONS | 0 |
| DO ALL BATCHES WITH THE 8021/8260 SERIES INCLUDE THE FOLLOWING? | |
| - LAB METHOD BLANK | Y |
| - MATRIX SPIKE | N |
| - MATRIX SPIKE DUPLICATE | N |
| - BLANK SPIKE | N |
| - SURROGATE SPIKE - NON-STANDARD SURROGATE USED | N |

## WATER SAMPLES FOR 8021/8260 SERIES

| | |
|---|---|
| MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) % RECOVERY BETWEEN 65-135% | n/a |
| MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) RPD LESS THAN 30% | n/a |
| SURROGATE SPIKES % RECOVERY BETWEEN 85-115% | n/a |
| BLANK SPIKE / BLANK SPIKE DUPLICATES % RECOVERY BETWEEN 70-130% | n/a |

## SOIL SAMPLES FOR 8021/8260 SERIES

| | |
|---|---|
| MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) % RECOVERY BETWEEN 65-135% | n/a |
| MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) RPD LESS THAN 30% | n/a |
| SURROGATE SPIKES % RECOVERY BETWEEN 70-125% | n/a |
| BLANK SPIKE / BLANK SPIKE DUPLICATES % RECOVERY BETWEEN 70-130% | n/a |

## FIELD QC SAMPLES

| SAMPLE | COLLECTED | DETECTIONS > REPDL |
|---|---|---|
| QCTB SAMPLES | N | 0 |
| QCEB SAMPLES | N | 0 |
| QCAB SAMPLES | N | 0 |

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# Electronic Submittal Information

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**Confirmation Number:** 7011763274
**Date/Time of Submittal:** 4/21/2005 11:43:08 PM
**Facility Global ID:** T0604793737
**Facility Name:** MBP TRUCK & AUTO
**Submittal Title:** 03-17-2005 Remediation Vapor
**Submittal Type:** Remediation O & M Reports

**Click here to view the detections report for this upload.**

**MBP TRUCK & AUTO**
15838 PAUL NEGRA RD
FIREBAUGH, CA 93622

**Regional Board - Case #: 5T24000523**
CENTRAL VALLEY RWQCB (REGION 5F) - **(WWG)**
**Local Agency (lead agency) - Case #: 24241**
MERCED COUNTY LOP - **(ELS)**

| CONF # | TITLE | QUARTER |
|---|---|---|
| 7011763274 | 03-17-2005 Remediation Vapor | Q1 2005 |

| SUBMITTED BY | SUBMIT DATE | STATUS |
|---|---|---|
| Christopher Miller | 4/21/2005 | PENDING REVIEW |

## SAMPLE DETECTIONS REPORT

| | |
|---|---|
| # FIELD POINTS SAMPLED | 2 |
| # FIELD POINTS WITH DETECTIONS | 1 |
| # FIELD POINTS WITH WATER SAMPLE DETECTIONS ABOVE MCL | 1 |
| SAMPLE MATRIX TYPES | AIR - UNK. ORIGIN |

## METHOD QA/QC REPORT

| | |
|---|---|
| METHODS USED | 8260FAB,M8015 |
| TESTED FOR REQUIRED ANALYTES? | N |

MISSING PARAMETERS NOT TESTED:
- 8260FAB REQUIRES ETBE TO BE TESTED
- 8260FAB REQUIRES TAME TO BE TESTED
- 8260FAB REQUIRES DIPE TO BE TESTED
- 8260FAB REQUIRES TBA TO BE TESTED
- 8260FAB REQUIRES DCA12 TO BE TESTED
- 8260FAB REQUIRES EDB TO BE TESTED
- 8260FAB REQUIRES ETHANOL TO BE TESTED

LAB NOTE DATA QUALIFIERS N

## QA/QC FOR 8021/8260 SERIES SAMPLES

| | |
|---|---|
| TECHNICAL HOLDING TIME VIOLATIONS | 0 |
| METHOD HOLDING TIME VIOLATIONS | 0 |
| LAB BLANK DETECTIONS ABOVE REPORTING DETECTION LIMIT | 0 |
| LAB BLANK DETECTIONS | 0 |
| DO ALL BATCHES WITH THE 8021/8260 SERIES INCLUDE THE FOLLOWING? | |
| - LAB METHOD BLANK | Y |
| - MATRIX SPIKE | N |
| - MATRIX SPIKE DUPLICATE | N |
| - BLANK SPIKE | N |
| - SURROGATE SPIKE - NON-STANDARD SURROGATE USED | N |

## WATER SAMPLES FOR 8021/8260 SERIES

| | |
|---|---|
| MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) % RECOVERY BETWEEN 65-135% | n/a |
| MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) RPD LESS THAN 30% | n/a |
| SURROGATE SPIKES % RECOVERY BETWEEN 85-115% | n/a |
| BLANK SPIKE / BLANK SPIKE DUPLICATES % RECOVERY BETWEEN 70-130% | n/a |

## SOIL SAMPLES FOR 8021/8260 SERIES

| | |
|---|---|
| MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) % RECOVERY BETWEEN 65-135% | n/a |
| MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) RPD LESS THAN 30% | n/a |
| SURROGATE SPIKES % RECOVERY BETWEEN 70-125% | n/a |
| BLANK SPIKE / BLANK SPIKE DUPLICATES % RECOVERY BETWEEN 70-130% | n/a |

## FIELD QC SAMPLES

| SAMPLE | COLLECTED | DETECTIONS > REPDL |
|---|---|---|
| QCTB SAMPLES | N | 0 |
| QCEB SAMPLES | N | 0 |
| QCAB SAMPLES | N | 0 |

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# Electronic Submittal Information

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**Confirmation Number:** 9198020040
**Date/Time of Submittal:** 5/19/2005 4:49:37 PM
**Facility Global ID:** T0607700895
**Facility Name:** MBP LINDEN
**Submittal Title:** First Quarter 2005
**Submittal Type:** GW Monitoring Report

**Click here to view the detections report for this upload.**

**MBP LINDEN**
8203 HWY 26 E
STOCKTON, CA 95206

**Regional Board - Case #: 391080**
CENTRAL VALLEY RWQCB (REGION 5S) - **(JLB)**
**Local Agency (lead agency) - Case #: 000691**
SAN JOAQUIN COUNTY LOP - **(ML)**

| CONF # | TITLE | QUARTER |
|---|---|---|
| 9198020040 | First Quarter 2005 | Q1 2005 |

| SUBMITTED BY | SUBMIT DATE | STATUS |
|---|---|---|
| Christopher Miller | 5/19/2005 | PENDING REVIEW |

## SAMPLE DETECTIONS REPORT

| | |
|---|---|
| # FIELD POINTS SAMPLED | 3 |
| # FIELD POINTS WITH DETECTIONS | 0 |
| # FIELD POINTS WITH WATER SAMPLE DETECTIONS ABOVE MCL | 0 |
| SAMPLE MATRIX TYPES | WATER |

## METHOD QA/QC REPORT

| | |
|---|---|
| METHODS USED | 8260FAB,M8015 |
| TESTED FOR REQUIRED ANALYTES? | N |
| MISSING PARAMETERS NOT TESTED: | |
| - 8260FAB REQUIRES ETHANOL TO BE TESTED | |
| - 8260FAB REQUIRES XYLENES TO BE TESTED | |
| LAB NOTE DATA QUALIFIERS | N |

## QA/QC FOR 8021/8260 SERIES SAMPLES

| | |
|---|---|
| TECHNICAL HOLDING TIME VIOLATIONS | 0 |
| METHOD HOLDING TIME VIOLATIONS | 0 |
| LAB BLANK DETECTIONS ABOVE REPORTING DETECTION LIMIT | 0 |
| LAB BLANK DETECTIONS | 0 |
| DO ALL BATCHES WITH THE 8021/8260 SERIES INCLUDE THE FOLLOWING? | |
| - LAB METHOD BLANK | Y |
| - MATRIX SPIKE | N |
| - MATRIX SPIKE DUPLICATE | N |
| - BLANK SPIKE | N |
| - SURROGATE SPIKE - NON-STANDARD SURROGATE USED | N |

## WATER SAMPLES FOR 8021/8260 SERIES

| | |
|---|---|
| MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) % RECOVERY BETWEEN 65-135% | n/a |
| MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) RPD LESS THAN 30% | n/a |

| | |
|---|---|
| SURROGATE SPIKES % RECOVERY BETWEEN 85-115% | n/a |
| BLANK SPIKE / BLANK SPIKE DUPLICATES % RECOVERY BETWEEN 70-130% | n/a |

## SOIL SAMPLES FOR 8021/8260 SERIES

| | |
|---|---|
| MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) % RECOVERY BETWEEN 65-135% | n/a |
| MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) RPD LESS THAN 30% | n/a |
| SURROGATE SPIKES % RECOVERY BETWEEN 70-125% | n/a |
| BLANK SPIKE / BLANK SPIKE DUPLICATES % RECOVERY BETWEEN 70-130% | n/a |

## FIELD QC SAMPLES

| SAMPLE | COLLECTED | DETECTIONS > REPDL |
|---|---|---|
| QCTB SAMPLES | N | 0 |
| QCEB SAMPLES | N | 0 |
| QCAB SAMPLES | N | 0 |

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